

```

1 GTCTCGTGTA TGGCGTGGTT AAGGTTGCAG CCTCTCACCT CTGCCTTCCT
51 CCATTTTGGG CTGGTTACCT TTGTGCTCTT CCTGAATGGT CTTTCGAGCAG
101 AGGCTGGTGG CTCAGGGGAC GTGCCAAGCA CAGGGCAGAA CAATGAGTCC
151 TGTTCAGGGT CATCGGACTG CAAGGAGGGT GTCATCCTGC CAATCTGGTA
201 CCCGGAGAAC CCTTCCCTTG GGGACAAGAT TGCCAGGGTC ATTGTCTATT
251 TTGTGGCCCT GATATACATG TTCTTGGGGT TGTCCATCAT TGCTGACCGC
301 TTCATGGCAT CTATTGAAGT CATCACCTCT CAAGAGAGGG AGGTGACAAT
351 TAAGAAACCC AATGGAGAAA CCAGCACAAC CACTATTCGG GTCTGGAATG
401 AAACGTCTC CAACCTGACC CTTATGGCCC TGGGTTCCTC TGCTCCTGAG
451 ATACTCCTCT CTTTAATTGA GGTGTGTGGT CATGGGTTC TGTCTGGTGA
501 TCTGGGACCT TCTACCATTG TAGGGAGTGC AGCCTTCAAC ATGTTTCATCA
551 TCATTGGCAT CTGTGTCTAC GTGATCCAG ACGGAGAGAC TCGCAAGATC
601 AAGCATCTAC GAGTCTTCTT CATCACCGCT GCTTGGAGTA TCTTTGCCTA
651 CATCTGGCTC TATATGATTG TGGCAGTCTT CTCCCTGGT GTGGTCCAGG
701 TTTGGGAAGG CCTCCTCACT CTCTTCTCTT TTCCAGTGTG TGTCTTCTG
751 GCCTGGGTGG CAGATAAAG ACTGCTCTTC TACAAATACA TGCACAAAAA
801 GTACCCGACA GACAAACACC GAGGAATTAT CATAGAGACA GAGGGTGACC
851 ACCCTAAGGG CATGAGATG GATGGGAAAA TGATGAATTC CCATTTTCTA
901 GATGGGAACC TGGTGGCCCT GGAAGGGAAG GAAAGTGGATG AGTCCCGCAG
951 AGAGATGATC CGGATCCTCA AGGATCTGAA GCAAAAACAC CCAGAGAAGG
1001 ACTTAGATCA GCTGGTGGAG ATGGCCAATT ACTATGCTCT TCCCCACCAA
1051 CAGAAGAGCC GCGCCTTCTA CCGTATCCAA GCCACTCGTA TGATGACTGG
1101 TGCAGGCAAT ATCCTGAAGA AACATGCAGC AGAACAAGCC AAGAAGGCCT
1151 CCAGCATGAG CGAGGTGCAC ACCGATGAGC CTGAGGACTT TATTTCCAAG
1201 GTCTTCTTTG ACCCATGTTT TTACCAAGTC CTGGAGAACT GTGGGGCTGT
1251 ACTCTTGACA GTGGTGAGGA AAGGGGAGGA CATGTCAAAG ACCATGTATG
1301 TGGACTACAA AACAGAGGAT GGTCTGCCA ATGCAGGGGC TGACTATGAG
1351 TTCACAGAGG GCACGGTGGT TCTGAAGCCA GGAGAGACCC AGAAGGAGTT
1401 CTCCGTGGGC ATAATTGATG ACGACATTTT TGAGGAGGAT GAACACTTCT
1451 TTGTAAGGTT GAGCAATGTC CGCATAGAGG AGGAGCAGCC AGAGGAGGGG
1501 ATGCCTCCAG CAATATTCAA CAGTCTTCCC TTGCCTCGGG CTGTCTTAGC
1551 CTCCCCTTGT GTGGCCACAG TTACCATCTT GGATGATGAC CATGCAGGCA
1601 TCTTCACTTT TGAATGTGAT ACTATTCATG TCAGTGAGAG TATTGGTGT
1651 ATGGAGGTCA AGGTTCTGCG GACATCAGGT GCCCGGGGTA CAGTCATCGT
1701 CCCCTTTAGG ACAGTAGAAG GGACAGCCAA GGGTGGCGGT GAGGACTTTG
1751 AAGACACATA TGGGGAGTTG GAATTCAAGA ATGATGAAAC TGTGAAAACC
1801 ATAAGGGTTA AAATAGTAGA TGAGGAGGAA TACGAAAGGC AAGAGAATTT
1851 CTTCAATTGCC CTTGGTGAAC CGAAATGGAT GGAACGTGGA ATATCAGATG
1901 TGACAGACAG GAAGCTGACT ATGGAAGAAG AGGAGGCCAA GAGGATAGCA
1951 GAGATGGGAA AGCCAGTATT GGGTGAACAC CCCAACTGG AAGTCATCAT
2001 TGAAGAGTCC TATGAGTTCA AGACTACGGT GGACAACTG ATCAAGAAGA
2051 CAAACCTGGC CTTGGTTGTG GGGACCCATT CCTGGAGGGA CCAGTTCATG
2101 GAGGCCATCA CCGTCAGTGC AGCAGGGGAT GAGGATGAGG ATGAATCCGG
2151 GGAGGAGAGG CTGCCCTCCT GCTTTGACTA CGTCATGCAC TTCCTGACTG
2201 TCTTCTGGAA GGTGCTGTTT GCCTGTGTGC CCCCCACAGA GTACTGCCAC
2251 GGCTGGGCCT GCTTCGCCGT CTCCATCCTC ATCATTGGCA TGCTCACC GC
2301 CATCATTTGG GACCTGGCCT CGCACTTCGG CTGCACCATT GGTCTCAAAG
2351 ATTCGGTCAC AGCTGTTGTT TTCGTGGCAT TTGGCACCTC TGTCCCAGAT
2401 ACGTTTGCCA GCAAAGCTGC TGCCCTCCAG GATGTATATG CAGACGCCTC
2451 CATTGGCAAC GTGACGGGCA GCAACGCCGT CAATGTCTTC CTGGGCATCG
2501 GCCTGGCCTG GTCCGTGGCC GCCATCTACT GGGCTCTGCA GGGACAGGAG
2551 TTCCACGTGT CGGCCGGCAC ACTGGCCTTC TCCGTCAACC TCTTACCAT
2601 CTTTGCAATT GTCTGCATCA GCGTGTCTT GTACCGAAGG CGGCCGCACC
2651 TGGGAGGGGA GCTTGGTGGC CCCCCTGGCT GCAAGCTCGC CACAACATGG
2701 CTCTTTGTGA GCCTGTGGCT CCTCTACATA CTCTTTGCCA CACTAGAGGC
2751 CTATTGCTAC ATCAAGGGGT TCTAAGCCAC AC
(SEQ ID NO: 1)

```

5'UTR: 1 - 9  
Start Codon: 10  
Stop Codon: 2773  
3'UTR: 2776

**HOMOLOGOUS PROTEINS:**  
**Top 10 BLAST Hits:**

		Score	E
Sequences producing significant alignments:		(bits)	Value
CRA 18000005047237	/altid=gi 2498054 /def=sp P70549 NAC3_RAT SO...	1828	0.0
CRA 18000005200270	/altid=gi 4140706 /def=gb AAD04173.1 _ (AF107...	1342	0.0
CRA 1000682343796	/altid=gi 6453729 /def=gb AAF08988.1 AF108389...	1338	0.0
CRA 18000004939788	/altid=gi 1083801 /def=pir  S43730 Na+/Ca2+-...	1335	0.0
CRA 18000005028314	/altid=gi 1279782 /def=gb AAA97928.1  (U5266...	1334	0.0
CRA 18000004968774	/altid=gi 382752 /def=prf  1901175A Na/Ca ex...	1333	0.0
CRA 18000004882912	/altid=gi 627801 /def=pir  B53335 Na+/Ca2+-e...	1331	0.0
CRA 18000005218648	/altid=gi 4566522 /def=gb AAD23386.1 AF10916...	1330	0.0
CRA 18000005218651	/altid=gi 4566528 /def=gb AAD23389.1 AF10916...	1329	0.0
CRA 18000004907324	/altid=gi 479177 /def=pir  S32435 Na+/Ca2+-e...	1328	0.0

**dbEST:**

		Score	E
Sequences producing significant alignments:		(bits)	Value
gi 11600765	/dataset=dbest /taxon=96...	500	e-138
gi 318815	/dataset=dbest /taxon=9606 /...	216	2e-53

**EXPRESSION INFORMATION FOR MODULATORY USE:**

gi|11600765 Pooled (Brain, Heart, Kidney, Lung, Spleen, Testis, Leukocyte)  
gi|318815 Fetal brain

**Tissue expression:**

Pooled tissues (Brain, Heart, Kidney, Lung, Spleen, Testis, Leukocyte)

```

1 MAWLRLQPLT SAFLHFGLVT FVLFLNGLRA EAGGSGDVPS TGQNNESCSG
51 SSDCKEGVIL PIWYPENPSL GDKIARVIVY FVALIYMFLG VSIIADRFMA
101 SIEVITSQER EVTIKKPNGE TSTTTIRVWN ETVSNLTLMA LGSSAPEILL
151 SLIEVCGHGF IAGDLGPSTI VGSAAFNMTI IIGICVYVIP DGETRRIKHL
201 RVFFITAAWS IFAYIWLYMI LAVFSPGVVQ VWEGLLTFFF FPVCVLLAWV
251 ADKRLLEFYKY MHKRYRTDKH RGIIIEDEGD HPKGIEMDGK MMNSHFLDGN
301 LVPLEGKEVD ESRREMIRIL KDLKQKHPEK DLDQLVEMAN YYALSHQQKS
351 RAFYRIQATR MMTGAGNILK KHAAEQAKKA SSMSEVHTDE PEDFISKVFF
401 DPCSYQCLN CGAVLLTVVR KGGDMSKTMV VDYKTEDGSA NAGADYEFTE
451 GTVVLKPGET QKEFSVGIID DDIFEDEHFF FVRLSNVRIE EEQPEEGMPP
501 AIFNSLPLPR AVLASPCVAT VTILDDDHAG IFTFECDTIH VSESIGVMEV
551 KVLRTSGARG TVIVPFRTVE GTAKGGGEDF EDTYGELEFK NDETVKTIRV
601 KIVDEEYER QENFFIALGE PKWMERGISD VTDRKLTTEE EEAKRIAEMG
651 KPVVLGEHPKL EVIIEESYEF KTTVDKLIKK TNLALVVGTH SWRDQFMEAI
701 TVSAAGDEDE DESGEERLPS CFDYVMHFLT VFWKVLFACV PPTEYCHGWA
751 CFAVSILIIG MLTAIIGDLA SHFGCTIGLK DSVTAVVFVA FGTSPVDTFA
801 SKAAALQDVY ADASIGNVTG SNAVNVLGI GLAWSVAAYI WALQGQEFHV
851 SAGTLAFSVT LFTIFAFVCI SVLLYRRRPH LGGELGGPRG CKLATTWLFV
901 SLWLLYILFA TLEAYCYIKG F
(SEQ ID NO:2)

```

#### FEATURES:

##### Functional domains and key regions:

[1] PDOC00001 PS00001 ASN\_GLYCOSYLATION  
N-glycosylation site

Number of matches: 4

1	45-48	NESC
2	130-133	NETV
3	135-138	NLTL
4	817-820	NVTG

[2] PDOC00004 PS00004 CAMP\_PHOSPHO\_SITE  
cAMP- and cGMP-dependent protein kinase phosphorylation site

Number of matches: 2

1	378-381	KKAS
2	634-637	RKLT

[3] PDOC00005 PS00005 PKC\_PHOSPHO\_SITE  
Protein kinase C phosphorylation site

Number of matches: 11

1	113-115	TIK
2	125-127	TIR
3	597-599	TIR
4	194-196	TRK
5	267-269	TDK
6	312-314	SRR
7	460-462	TQK
8	572-574	TAK
9	594-596	TVK
10	125-127	TIR
11	597-599	TIR

[4] PDOC00006 PS00006 CK2\_PHOSPHO\_SITE  
Casein kinase II phosphorylation site

Number of matches: 16

1	69-72	SLGD
2	106-109	TSQE
3	144-147	SAPE
4	151-154	SLIE
5	277-280	TEGD
6	312-315	SRRE
7	382-385	SMSE
8	460-463	TQKE
9	522-525	TILD
10	583-586	TYGE
11	637-640	TMEE
12	672-675	TTVD
13	691-694	SWRD
14	713-716	SGEE
15	720-723	SCFD
16	794-797	SVPD

[5] PDOC00007 PS00007 TYR\_PHOSPHO\_SITE  
Tyrosine kinase phosphorylation site

Number of matches: 2

1	397-405	KVFFDPCSY
2	601-608	KIVDEEY

[6] PDOC00008 PS00008 MYRISTYL  
N-myristoylation site

Number of matches: 15

1	50-55	GSSDCK
2	422-427	GGDSK
3	438-443	GSANAG
4	497-502	GMPPAI
5	557-562	GARGTV
6	571-576	GTAKGG
7	760-765	GMLTAI
8	774-779	GCTIGL
9	778-783	GLKDSV
10	816-821	GNVTGS
11	829-834	GIGLAW
12	831-836	GLAWSV
13	882-887	GGELGG
14	886-891	GGPRGC
15	890-895	GCKLAT

#### Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	8	28	1.905	Certain
2	76	96	2.032	Certain
3	133	153	1.009	Certain
4	169	189	1.943	Certain
5	206	226	2.118	Certain
6	231	251	2.072	Certain
7	505	525	0.666	Putative
8	723	743	1.298	Certain
9	747	767	2.258	Certain
10	781	801	1.232	Certain
11	823	843	1.793	Certain
12	854	874	2.424	Certain
13	893	913	2.138	Certain



# BLAST Alignment to Top Hit:

```
>CRA|18000005047237 /altid=gi|2498054 /def=sp|P70549|NAC3_RAT
SODIUM/CALCIUM EXCHANGER 3 PRECURSOR (NA+/CA2+-EXCHANGE
PROTEIN 3) /org=NA+/CA2+-EXCHANGE PROTEIN 3 /dataset=nraa
/length=927
Length = 927
```

Score = 1828 bits (4682), Expect = 0.0  
Identities = 897/927 (96%), Positives = 911/927 (97%), Gaps = 6/927 (0%)  
Frame = +1

```
Query: 10 MAWLRLQPLTSAFLHFGLVTFVLFNLGLRAEAGGSDVPSTGQNNESCSGSSDCKEGVIL 189
MAWLRLQPLTSAFLHFGLVTFVLFNLGLRAEAG DVPS GQNNESCSGSSDCKEGVIL
Sbjct: 1 MAWLRLQPLTSAFLHFGLVTFVLFNLGLRAEAGDLRDVPSAGQNNESCSGSSDCKEGVIL 60

Query: 190 PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE 369
PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE
Sbjct: 61 PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE 120

Query: 370 TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFAGDLGPSTIVGSAAFNMFI 549
TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFAGDLGPSTIVGSAAFNMFI
Sbjct: 121 TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFAGDLGPSTIVGSAAFNMFI 180

Query: 550 IIGICVYVIPDGETRGIKHLRVFFITAAWSIFAYIWLYMILAVFSPGVVQVWEGLLTLFF 729
IIGICVYVIPDGETRGIKHLRVFF+TAAWS+FAYIWLYMILAVFSPGVVQVWEGLLTLFF
Sbjct: 181 IIGICVYVIPDGETRGIKHLRVFFTAAWSVFAYIWLYMILAVFSPGVVQVWEGLLTLFF 240

Query: 730 FPVCVLLAWVADKRLLFYKYMHKYRTDKHRGIIIETEGDHPKGIEMDGKMMNSHFLDGN 909
FPVCVLLAWVADKRLLFYKYMHK+YRTDKHRGIIIETEG+HPKGIEMDGKMMNSHFLDGN
Sbjct: 241 FPVCVLLAWVADKRLLFYKYMHKRYRTDKHRGIIIETEGEHPKGIEMDGKMMNSHFLDGN 300

Query: 910 LVPLEGKEVDESRRMIRILKDLKQKHPEKDLDQLVEMANYALSHQQKSRFYRIQATR 1089
L+PLEGKEVDESRRMIRILKDLKQKHPEKDLDQLVEMANYALSHQQKSRFYRIQATR
Sbjct: 301 LIPLEGKEVDESRRMIRILKDLKQKHPEKDLDQLVEMANYALSHQQKSRFYRIQATR 360

Query: 1090 MMTGAGNILKKHAAEQAKKASSMSEVHTDEPEDFISKVFFDPCSYQCLENCGAVLLTVVR 1269
MMTGAGNILKKHAAEQAKK +SMSEVHTDEPEDF SKVFFDPCSYQCLENCGAVLLTVVR
Sbjct: 361 MMTGAGNILKKHAAEQAKKTASMSEVHTDEPEDFASKVFFDPCSYQCLENCGAVLLTVVR 420

Query: 1270 KGGDSMTMYVDYKTEDGSANAGADYEFTEGTVVLPGETQKEFSVGIIDDDIFEDEHF 1449
KGGD+SKTMYVDYKTEDGSANAGADYEFTEGTVVLPGETQKEFSVGIIDDDIFEDEHF
Sbjct: 421 KGGDISKTMYVDYKTEDGSANAGADYEFTEGTVVLPGETQKEFSVGIIDDDIFEDEHF 480

Query: 1450 FVRLSNVRIEEEQPEEGMPAIFNSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH 1629
FVRLSNVR+EEEQ EEGM PAI NSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH
Sbjct: 481 FVRLSNVRVEEQLEEGMTPAIINSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH 540

Query: 1630 VSESIGMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETVKTIRV 1809
VSESIGMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETVKTIRV
Sbjct: 541 VSESIGMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETVKTIRV 600

Query: 1810 KIVDEEYERQENFFIALGEPKWMERGIS-----DVTDRKLTMEEEEAKRIAEMGKPV 1971
KIVDEEYERQENFFIALGEPKWMERGIS +VTDKLTMEEEEAKRIAEMGKPV
Sbjct: 601 KIVDEEYERQENFFIALGEPKWMERGISALLSPEVTDKLTMEEEEAKRIAEMGKPV 660

Query: 1972 GEHPKLEVIIIEESYEFKTTVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDEDEDESG 2151
GEHPKLEVIIIEESYEFK+TVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDE+EDESG
Sbjct: 661 GEHPKLEVIIIEESYEFKSTVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDEEDESG 720

Query: 2152 EERLPSCFDYVMHFLT VFWKVLFAVPPTEYCHGWACFAVSILIIIGMLTAIIGDLASHFG 2331
EERLPSCFDYVMHFLT VFWKVLFAVPPTEYCHGWACF VSILIIIGMLTAIIGDLASHFG
Sbjct: 721 EERLPSCFDYVMHFLT VFWKVLFAVPPTEYCHGWACFVSILIIIGMLTAIIGDLASHFG 780

Query: 2332 CTIGLKDSVTAVVFAFGTSVPDPTFASKAAALQDVYADASIGNVTGSNAVNVFLGIGLAW 2511
CTIGLKDSVTAVVFAFGTSVPDPTFASKAAALQDVYADASIGNVTGSNAVNVFLGIGLAW
Sbjct: 781 CTIGLKDSVTAVVFAFGTSVPDPTFASKAAALQDVYADASIGNVTGSNAVNVFLGIGLAW 840

Query: 2512 SVAAIYWALQGQEFHVSAGTLAFSVTLFTIFAFVCISVLLYRRRPHLGGLGGPRGCKLA 2691
SVAAIYWA+QGQEFHVSAGTLAFSVTLFTIFAFVC+SVLLYRRRPHLGGLGGPRGCKLA
Sbjct: 841 SVAAIYWAMQGQEFHVSAGTLAFSVTLFTIFAFVCLSVLLYRRRPHLGGLGGPRGCKLA 900
```

FIGURE 2, page 3 of 4

Query: 2692 TTWLFVSLWLLYLFLATLEAYCYIKGF 2772  
TTWLFVSLWLLY+LFATLEAYCYIKGF  
Sbjct: 901 TTWLFVSLWLLYVLFATLEAYCYIKGF 927 (SEQ ID NO:4)

**Hmmer search results (Pfam):**

Scores for sequence family classification (score includes all domains):

Model	Description	Score	E-value	N
PF01699	Sodium/calcium exchanger protein	294.6	1.2e-84	2
PF00324	Amino acid permease	2.8	5.9	1
PF01971	Protein of unknown function	2.7	8.7	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF01699	1/2	118	257 ..	12	152 .]	121.3	1.8e-32
PF01971	1/1	644	670 ..	193	222 ..	2.7	8.7
PF00324	1/1	851	877 ..	472	498 .]	2.8	5.9
PF01699	2/2	757	905 ..	1	152 []	181.4	1.5e-50

1 TTGGATGAGA TCTAAAGCAT TATTAAGAGT GGGGAGTGCA AAGAAGAAAC  
51 CCTCATTTTCA AAGATGAATG AGAATAATGG CATGTACAAA GGTCTGGGG  
101 TGGACAGTCA CTTGGTATAA TCCAAGAGTG AACCTGAAGG CTATTGTTGT  
151 TGAATGTAA TAAGGGAGAG AGTGACGGGA TGAAGGGGGA TGAGTGGGAA  
201 GCAGTGAATT CCTGCAAGGC TTTGAAGGTC ATGGGAAAGA ATTTGGTCTT  
251 TATATCAAGA GCAAGAGAAG ACTACTAAAG GGCTTCAAAC AGGGGAGCGA  
301 TATGCTTAAG TCTGTTTGT TGTTTTTTTA AAAAAAGATT ACGETGGCTA  
351 TATGAGGAAA GTGGAATTGA GAACTAGCGA GAGTTGGAGT GGTGAGCTCC  
401 ATTAGGAGGC TACTGAAGTA GATTTCATGAG GTAAGGAGTG ATGGTGGCCT  
451 GGGCTGGGAT GATGGTGGTA GAAATGGAGA AAGAGTTGAT AGGATTTAGT  
501 GATTGGATAA GGGACAGAAG AGAGATGAAG GCTTTCAGAC TAACATCTGC  
551 TTTCTAACAT GAGTAACGG GTGGCTGAAG ATGCTATTTT CTGAGCTGGG  
601 AAACAGGAGA AAAAGGAGCA AATATGGGGG ATGAAGACTT TGAGTCTTTA  
651 AGGTGCTGTA CAACACAAA TCAGCATTC TTTATTACTA AGGTATCCC  
701 ACACAGTTGT AGCAGAGGGA GAAAGATCGC CCCCCCCCCA CTTTTTTTTT  
751 TTTTTTAGCT ATTCCATGGT ATTTTCATTC TCATCCCACC CAAATGAGGC  
801 AGTGAGTGGT AAGATGAGTA TATAATAGTT TCAATTGCAT TTCATCCCAT  
851 TCTTCTGAGC TCAAGCTCAC CTTTTAGTGG TTTGAGGCCA GTAGATGAAG  
901 CTGCATATCA CCCCCAAAAT CTGTCTCTA GTTTAACAAA ACTTATTGTA  
951 GAGACATTTG CATGTTTTAT TAATAATGAT TTTTACCAC TGTTCCTTTC  
1001 CATGTTTGGG TTTGAAATTT GAGTGGCTGG CGGATGATCA TCTTCCTGTT  
1051 ACTGCCTGCT TAACTGCTC ATAAGCAGGT TTTACTGGAG GGCTCAGAGC  
1101 TGCTGTGAAC TTGGTCTTGG GCACAACCTA CATGGCCTCT GTTTGGCTAT  
1151 GGGGTGGGTG GCATTACCA TTTATCAACT CTTTTGATTT CCCAAGCTAT  
1201 CTCAGAATTA TAGCTTGCTT CCAGAAGTCT TGCATTCGGG GAGGAAGTTT  
1251 CTTTCCAAGG GAGCTCAGTT TTCAAGGTTT ATTGCTCTGT TTAATGGATG  
1301 AGATCTAAAG CATTATTAAG AGTGGGGAGT GCAAAGAAGA AACACTCATT  
1351 TCAAAATCGA TTGAGAATAA TGGCATGTAC AAAGTCCCTG GGGTGGACAG  
1401 TCACTTGGTA TAATCCTGGA GTGAACATGA AGGCCAAGGA AATATGTATA  
1451 CATTAAACAG AGCAAGGTTT TCAATTTTCT GGGGACTAGT CCATGAAAT  
1501 TCAATTCAT ATACTCTCTT GCAAACCTAT GTTATCCAAG ATACTCAAGT  
1551 ATAATGACAA CAGGGTAAGG AAGTCCGAAC ACCCCAGAAA CAGTATAAAT  
1601 GGGCATGAAG ATTCAGGTTA TACATGGCCT ATTTTAAAGT GCTTCTTGAG  
1651 AACTCTCACA GGTAAATACCA GTTTGGGAGA CAGGACTTGA AGGCTATTGC  
1701 TGCATTTCCTA TCCCCAGTAT TCCCAGCTAT TTCAAGCCAT TTTTCAACGG  
1751 AGTCTCCACC AGATGGTTTG GAGGACAGAG CAGCTATTTG TGCTCCCAT  
1801 TGACATCTAT TTTTCCAAGT GAGAGACTGC CCCATATGTT AGTGCAATAT  
1851 GTCATGGAG GTGAAGCATC AGTTGTATTG GTGGGAACCT GCCGTTTGCT  
1901 GTCCCTTTTT TCCTCATGCC TTTTCTGCC TCTCTGATCT TTTCTAGGTC  
1951 TCTGGCCTAT CAGGAGGACA ACTGGTGCTG CAATAGAAGC CAGTGGCTAA  
2001 GTCTCGTGTA TGGCGTGGTT AAGGTTGCAG CCTCTCACCT CTGCCTTCCT  
2051 CCATTTTGGG CTGGTTACCT TTGTGCTCTT CCTGAATGGT CTTGAGCAG  
2101 AGGCTGGTGG CTCAGGGGAG GTGCCAAGCA CAGGGCAGAA CAATGAGTCC  
2151 TGTTCAGGGT CATCGGACTG CAAGGAGGGT GTCATCCTGC CAATCTGGTA  
2201 CCCGGAGAAC CCTTCCCTTG GGGACAAGAT TGCCAGGGTC ATTTGCTATT  
2251 TTGTGGCCCT GATATACATG TTCCTTGGGG TGTCCATCAT TGCTGACCGC  
2301 TTCATGGCAT CTATTGAAGT CATCACCTCT CAAGAGAGGG AGGTGACAAAT  
2351 TAAGAAACCC AATGGAGAAA CCAGCACAAAC AACTATTCGG GTCTGGAATG  
2401 AAAGTGTCTC CAACCTGACC CTTATGGCCC TGGGTTCCCTC TGCTCCTGAG  
2451 ATACTCCTCT CTTTAAATTGA GGTGTGTGGT CATGGGTTCA TTGCTGGTGA  
2501 TCTGGGACCT TCTACCATTG TAGGGAGTGC AGCCTTCAAC ATGTTTCATCA  
2551 TCATTGGCAT CTGTGTCTAC GTGATCCCAG ACGGAGAGAC TCGCAAGATC  
2601 AAGCATCTAC GAGTCTTCTT CATCACCGCT GCTTGGAGTA TCTTTGCCA  
2651 CATCTGGCTC TATATGATTG TGGCAGTCTT CTCCCCTGGT GTGGTCCAGG  
2701 TTTGGGAAGG CCTCTCACT CTCTTCTTCT TTCCAGTGTG TGTCTCTCTG  
2751 GCCTGGGTGG CAGATAAACG ACTGCTCTTC TACAAATACA TGCACAAAAA  
2801 GTACCGCACA GACAAACACC GAGGAATTAT CATAGAGACA GAGGGTGACC  
2851 ACCCTAAGGG CATTGAGATG GATGGGAAAA TGATGAATTC CCATTTTCTA  
2901 GATGGGAACC TGGTCCCCCT GGAAGGGAAG GAAGTGGATG AGTCCCGCAG  
2951 AGAGATGATC CGGATTCTCA AGGATCTGAA GCAAAAACAC CCAGAGAAGG  
3001 ACTTAGATCA GCTGTTGGAG ATGGCCAATT ACTATGCTCT TTCCCACCAA  
3051 CAGAAGAGCC GCGCCTTCTA CCGTATCCAA GCCACTCGTA TGATGACTGG  
3101 TGCAGGCAAT ATCCTGAAGA AACATGCAGC AGAACAAGCC AAGAAGGCCT  
3151 CCAGCATGAG CGAGGTGCAC ACCGATGAGC CTGAGGACTT TATTTCCAAG  
3201 GTCTTCTTTG ACCCATGTTT TTACCAAGTG CTGGAGAACT GTGGGGCTGT  
3251 ACTCCTGACA GTGGTGAGGA AAGGGGGAGA CATGTCAAAG ACCATGTATG  
3301 TGGACTACAA AACAGAGGAT GGTCTGCCA ATGCAGGGGC TGACTATGAG  
3351 TTCACAGAGG GCACGGTGGT TCTGAAGCCA GGAGAGACCC AGAAGGAGTT  
3401 CTCCGTGGGC ATAATTGATG ACGACATTTT TGAGGAGGAT GAACACTTCT  
3451 TTGTAAGGTT GAGCAATGTC CGCATAGAGG AGGAGCAGCC AGAGGAGGGG  
3501 ATGCCTCCAG CAATATTCAA CAGTCTTCCC TTGCCTCGGG CTGCTCTAGC

FIGURE 3, page 1 of 61

3551 CTCCCCTTGT GTGGCCACAG TTACCATCTT GGATGATGAC CATGCAGGCA  
3601 TCTTCACFTT TGAATGTGAT ACTATTCATG TCAGTGAGAG TATTGGTGTT  
3651 ATGGAGGTCA AGGTTCTGCG GACATCAGGT GCCCGGGGTA CAGTCATCGT  
3701 CCCCTTTAGG ACAGTAGAAG GGACAGCCAA GGGTGGCGGT GAGGACTTTG  
3751 AAGACACATA TGGGGAGTTG GAATTCAAGA ATGATGAAAC TGTGTAAGTA  
3801 ACCTTCCTGT ATTCTGCCCC TCCCTGACCC CATCTTTTGC CATCTCTTTC  
3851 TGTCTTTCTG TACTGCACTT TACAACATTT CCTTGTGTTT GTGTTAATGT  
3901 CAAACTTTGG TTCCATCACA GGTATGCAGG ATCAGCAGAC ACCACTGGAC  
3951 AGGTTCTGCT TCCAACTCT TCTTCAGTTT TCTCACTTTA AATTGTTTCT  
4001 GGGCAAGGAA TCCTGTGACA AGAGCTAAGG ACACAAAACA TTTTCTTCTC  
4051 TGAACACAAA AATGATAGCT GGTGGAGCTG TGGGATGACA GAAGTTTGT  
4101 GATATCAGAT TTTGGAGAAT TCTTGTGACT AAGAAGGACT AGAGAACTGC  
4151 TTGGGCCCTCT TCTTCTCCCT TTCCCTCATAT GAAGGGTATC TATGAGCTTT  
4201 GAAACCAATC CTTTCCATTG TGGGCAGCAA TAGCCCATCA GAACATTCTA  
4251 AAGAAAACAA GTTGGCATTG CTTTGTTCCT TGGTACTATA TTGCCAGTCT  
4301 CACTGTGTAA CCAGATTCCA GGCACGTCTT CTTTAATTTG GAAATTGCAA  
4351 AATTGATAGA AATTTAGCAA TCTTTTAAAT TGACCATAGA CTATTTAATG  
4401 GTGTGAGGCT TGCCAGCCT AGTTGAATTG AGTCAGTATG GTTGGATAC  
4451 TGGAAAGTAT CTTGGAGAAG CAGAGCTCCC AGGCGAGTGG CTAATTGTCT  
4501 TTAGTCACAG GTCTAAGCTC CAAAATCTGG TGAAGCAGTG AAGGAGAAAC  
4551 ATCCTAGGAA TTGTGGGAGG AAATATATCT TCTGTGTGGT CCTCTCTTTT  
4601 CACAGCTAG GACTCTCCTG AAGTACCTCT TCTTGGGCTA CTGCCCCATT  
4651 CAGCCCTTCA GAAACTGTGG GTATTACACT TCTGTCACTT CTATTACCTT  
4701 AAGCCTCTG CCCATTGAAC CCTCTTGCAA ATTGGTTATT CTGTCCTTTT  
4751 TCCAGTTTGA TAGCTTTAAA AGGGAAAGCA GAATGACTTT CCTCAGGATT  
4801 TGTAAGTTAG GAGAAAGTAG ACTTTCTTGG GTGGCCTAGA AGGTTGGAGA  
4851 AGACAAACGG GAACTTCTC TGAATGACTG AACATATCCA CAAATAATAA  
4901 GCGTGGCAGG AGATGGTGTG AAGAGTAAAA GGAGCATATA GGAAGTTGTG  
4951 TGTGTGGGGT GTCTGTTTCA AGAAGCTGCT AATATACCT TCAGTAAGAA  
5001 ATGAAGCCAT ACAACCTCTA GAAGAGGAGG AGGAAGGAAC TCATGGAAAA  
5051 TTGGGGAGCC ATAGAAGCTA GGGAGAGGTG TCCTAGGAGT GCTTCTGCCC  
5101 AGGTCCAGCC ATGAGACAGA GCTCAAAAAG AGCTGGGCAC TGCTGGTGAC  
5151 AGAACTGAGT GACCCGGGGG ATCCTGCATC TGTCTTACT CAATCCCTTC  
5201 TTAATAATGT GACTTGGGGC AGGTCATTTA TTGGTTCTGG AACTTAACTT  
5251 TCTGATATGC AAACCTGGAA TAACAATACT TTCTTGCCT GGAGGCAAGG  
5301 TCAGTCTTTT TTGCAGTTCC TTCCAGCTCT AAGATTTTCT GAACCATAGA  
5351 CATAGCACT CAGTGTAGGT CATATTCGCA CTTGCCAAA ATGGATCAGG  
5401 GAATATTGTC TCCTGAAGGG AAATGGCCAT TGACAAATTG ATTTATTAGA  
5451 GCTCTGTTTA TACATATTTG TGGGAAGGAT AATCATTTGT TAACGTAAAGT  
5501 AGAAACCTGT GCCTTCTGGA GAATACTATC CATTTATATG TACTCTGGGG  
5551 AGAGTGTTTA TACATACAAA TGAAGGACAG GGCCTCACTG GGAACAAA  
5601 CTCCATGGAA TTTCACATGA TTATCGCGAT GTCAGTGTGG AAGAAGATAT  
5651 GTTAAGGCAT TAAATGACAT TAAGACCACA AAATTTGCCA TAATTTGACG  
5701 GACTTGTGGT TCTTCTGATT CAGAACCCTT TCTACCCATG TCACGGATAG  
5751 GTAGTTTTTC AGAGATCAGA GGCTTAGTTC ATTCTATTAA TTTCCTCATT  
5801 CTATTAATAA TCAATTATGC ACCTAGGGTC TCTGAATACG ACTAAACCTT  
5851 CCTCAAACTT ATTTGCATTT TCAGTTTGTA TAATATCTTG GTGCAATGA  
5901 GCCTCGCAAA TGATCACTTC TGGGTAATAC TCATTCTAAA GGTATGTCAA  
5951 CCTTGAGAAAT TCTGGTCTAG ATATTCTAGG GTTTGGTGAA CAAATCTATG  
6001 TTCCCATCCA TCCCTTTTCA TTTATTTTTT AGACTTCATT CATTGCAGAA  
6051 TAATGAGTCC AAAACCTGCT CATCTGTCT CACGTGGCAC CCTATTTCTT  
6101 GATATTTTAA ATTGCAATTT TACAACCTAGA GGCAGTATTA CGGAGCAGAA  
6151 AAATCGTGGG TTCTAAGTAC TCTGGGTTAG GATTCTGGCT CCACTACTGA  
6201 TTTAATAATG TAGTTTGGGG AAATTTTATT AACCTATGAA ATTATTTCTT  
6251 CATTTGGCAA ATGGGGATAA TAATATCTCT CTTGCAGGGC CATTATGACG  
6301 ATTCAAGGTA TTGTATGCGG TGTACCTGGT ACACGGTATA TGCTCAGGAA  
6351 ACAAGACTCT TCATAGTAAT ATTGACGAAT TAACAATATT CTTCAGAAGA  
6401 CACTGTGGAG TTGTTTAGGT TACTTGGCTC TTTGTGTGAC CCTAAGTAAT  
6451 GAGCATGCCA GTTTGGGGTT ACTATGAAGA GTACTTACCT AAACCTATAA  
6501 AATATTAGAG CTAGAAAGGA CCTTAGAATA TCTTCTGCAG TCATGGTTCT  
6551 TAAATTTTAA TGTGTTGCTC AATCATCCAG GGATCTCACT GAAGGGCAGA  
6601 TTAGGATCCA GGAGGTCTAG GGGAGGGATT GAGATTCGCG ATTTCTAACA  
6651 AGTTCTGGAT GCTGCGGGCC CCAACTTAGA GGTGAAAGGT TCTGAAGCTC  
6701 TTGACCAAAC CAGGAGACCC AGCAAAGAAG TGGTTTTTCA GACAACTTGC  
6751 TTAATTGAAT AATGATTGTT TGCTCTTTAA TTCCAACFTT CAATGCCAAT  
6801 TTAGCAAGAA CCAGAGGCTG TGCTAATTGC CACACCAGTC TGGAAACCGA  
6851 AATGGATAGC TTAGGGTAC TTGGACAAAG TTGGAACATC TGCTTTCTAA  
6901 TCTCTCCCTC TTTGTATAGC TTTATTTGCC TACCAAGCCT GGTAGTATTG  
6951 AAAATCTGCC CTCACATAC TCCCTTAAAT ATAATCAAGT TGAGGCCAGG  
7001 CCTGTGCTCT ATCAATAATA TAGGATCCAC GAATTCACAT GTTTGGTTTT  
7051 ATGCTTTACT TCTTCAAAGG TGCTTTTAGC AGCATGGAAG AATGGAAAAG

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7101 CACGAGCTTT GGAATATGAA AGCAGATGTG AATCCATCAC TTACCAGTAA  
7151 CTTTTAACAA GTCACATCAC TTTTCTGAGT ACCAGGTTTT TGTGGACAA  
7201 CAGAAATAAT ATTCTCTATC CTTCAAGGGA ATACTAAATA TAAGTATGAG  
7251 AAAAATGCAC AGTGCCTTCT CGTAGATGGT GTTCAGTCAT TCAACAAACA  
7301 TTTGTTAGAT ATTTGCTATG TACTAGCTAC ATTACTAGGC ACTGGGGTTA  
7351 AATAAGTGAA TAAGACAAGC TGACATTTCA GCGCTCAAGG ATCTTACTGT  
7401 CAAGTGGAGA GGATCAAAGG GTACAGACAA ATCAAGGAAC GTGAGAGAAG  
7451 TGGTATGGCT GAGATGGATT GAATAAAGGA GCAATGAGAG CTCCTTGCAA  
7501 TGTGTGTGGT ACCACTGAGG ATTCTAAATT AACCTTCATT AAGGACTTAG  
7551 TAGTGACAGA GGTGAAGTGG GGATAGGTAC ATGATTAATT TACATCCATA  
7601 TTACAATGAA ACCTTAACAT TTAAGAGGGA TATTATTGAT GTCTTCATGA  
7651 TCCAGAAGAA TCCTCACCTT TGCAACCATC ACTATAGTCA CTCTTGAGA  
7701 ATTATGGCCT TTAAGACTGT AGCATGCAAT GACAAAACCT CACAGAGGTA  
7751 TGGGTTCTGC CGCACACTA ATTTCACTCA TTAACAAGT GACTGGCTCC  
7801 TATATCCCAG GCTCTCAGCA CGCCTTGCA AAATAACAGA TTATTGCAGC  
7851 TCTTGACCT TTGATGCCTC TGGGAATAGT CAAAGCCACA GATGTCAAAT  
7901 ATGTAAATGC CAAGATCTAT TATAATTAAA TAGTGCAGGC CTCCTTCAAA  
7951 GAAAAAAGC ATGTTGGCTG TGCTGCACGT TCTCCAACCA AATCAGAATG  
8001 TTAAGCTCG AAGGTATCTG ACCTCCATT TTTTAAATTA TGAAGATGAA  
8051 ATTCAGAAAG GGAAGGTAAC TTATCCAAGA TTACATGGCT AGCTATGATA  
8101 GAAAGTTAGA GTTGGAAAGG ACGTTAGAAA GTGAGGGTTT GAAAGGACTT  
8151 TAGAAGCTGC TTATTCAATG TTCTCTCTGC CCTTCCCAT CTTAGGCTTC  
8201 TCCATTTTTC TTTTATCCAT CAATAAAATG TTAACCTCAA AAAGAATATG  
8251 GCAATTCTTG GGTAAAAGAT GCTCTGGAAG TGTGAGTCCG GGAGTATTAT  
8301 GTGACTAATG TCCTAACTAA GAATAATAAT ATATTATGGA CTAGTTTAA  
8351 TCTCTGTTT CACCTTGAAC TGTTCAGGAA GAAAAATAGC CCACGGAAAT  
8401 TTTTAAAAA GCTTTTCTCT ATCTGAATTG AGAAAAGGTG ACAGGCATAG  
8451 TTGGAACATC TTTTAGGCAG TGCTGGTGAA CTTCAGGCTA GGCCTTGTTT  
8501 CATGAAATAA TAAAAATTTT CAAAATAATG CAGACCATTC CCTTCCAGGG  
8551 ATGCTTTCTC TGTAAATGTT TAACCCCAAG AAATCTTTCT GTAAAAATCT  
8601 ATAAAAATCT GGAGTGTTC AGGATACAAT TTGCACATTC TCCAATTTAA  
8651 CTAAACACA ATCGATTTTT TGTTTTCTTT TTCTTTGGCT TAGCAAGGTT  
8701 TTAAGATAGT CTCTTTCTGG CCACAGAGGG AGATGATTGG CCTCTAGAAT  
8751 ACCCTTTCTG TGCTTGAGAG AGTCACAAGA CTGCAAGCTC ATGGAGGATG  
8801 AGAGTCAAGT AGAGGTGGTG ACATCTCTCC CTTGGCCAAC ATCCCTCTCT  
8851 TTCTCTTTCC TTCTGCCTTC AGTGGCAGTA GCAAAAGTCC TCCTTCTCTT  
8901 TAGGTAGACA GTCAGCCACT ACAACTGTGG CTTCTGAAA TCCTCAGTGG  
8951 AGCTATGTAC TTGGCACAGA TTTGTCTTGA AGAAGGGACT CCATTTCTGA  
9001 GCCAGTTGTT GAATGGGGAT ACTTAGCAGT ACAGTGAGGC ATTTCCAGTA  
9051 GGATTGTTCA ACCACAATTG CCCACTTTCC AGGCCCAAAG GAATAATTGA  
9101 AGGCTATGTA GACTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTGAGATGG  
9151 AGTCTCGCTC TGTCGCCAG GCTGGAGTGC AGTGGCACAT CTCGGCTCAC  
9201 TGCAAGCTCT GAGTCCCGGG TTCACGCCAT TCTCCTGCCT CAGCCTCCCG  
9251 AGTAGCTAGG CTAATATAT ATATATTATA CATATATATT TATATTTATA  
9301 TATATATATA CCACCACGTC CGGCTAATAT ATATTATATC TTTTTTTTTT  
9351 TAGTAGGAAA GGGGTTTCAC CATGTTAGCC AGTATGGTCT CGATCTCCTG  
9401 ACCTCGTGAT CCACCAGCCT CAGCCTCCCA AAGTGCTGGG ATTACAGGCG  
9451 TGAGCCACCG TGCCGACCA TGCTATGTAA ACTTTTTAGC AGAAGCTTTA  
9501 GCTATTGTGT CCCGAAGGGC CCCAGGTCAT GATGAAATGT CTTTTTTTTT  
9551 TTTTGTCTCT TTTCTTCTTA ATTACTGAGA CTGTCAAAGA ATATGTCAA  
9601 GCATGACATA TTCCAACCTC AGGATCCATA AAACACCCCA AGTTCTGTGG  
9651 AGACCCTATC ACATCTGCAA AACTCTCCAG GAAGTCCAGA GCCCTCCTGG  
9701 TTAATTTGTT TTAGGGACTA GGCATGCGGT ATCCCCTGAC AACACTGGAT  
9751 CAGCAATTCT CCTACCTAAG TCAGTCCAC ACCATGTGCA GCAGAGTATC  
9801 CAGTGCCCTT GCCCTGGTCT GCTCACATTG GTTTGCTCTC CAGAATAATA  
9851 ATTCCTCAAT ATCCACAAGA GATTGATTCC AGAACTACTC CGAGGATACC  
9901 AAAAAATCCT AGATGCTCAA GTACCTGGTA TAAATGGCA CAGTATTGG  
9951 CATATGACCT AGGCATATTC TCTCCCATAT ACTTTATTTA TTTATTTATT  
10001 TCGGGACAGA ATCTCATTCT GTCGCCCAGG CTGTCACTCG CTTATTGCAA  
10051 CCTCTGCCTC CCAGGTTCAA GCAATTCTCC TGCTCAGCC TCCTAAGTAG  
10101 CTGGGACTAC AGACGCATGT CACCACGCCT GGCTACTTTT TGTATTTTAA  
10151 GTAGAGACAG AGTTTCACCA TGTGGCCAG GCTGGTCTCA AACACCTGAC  
10201 CTCAGTGAT CGCCCAACCT TGGCCTCCCA AAAAGCTGGG ATTACAGGCG  
10251 TGAGCTACCA CGTCCAGCCC CCCATATACT TTAATCATC TCTAGATTAC  
10301 TTATAATACC TAATACAATG TAAATGTTAT ATAGTTGTTT TAATGTATTG  
10351 CTTTTTTTAT TTGTATTGTT TTTTATPGCT GTATTATCCT TTTTATGTT  
10401 TTATTTTTTC AAATATTTTC TACCCGTGGC ACCACAGTT GGTGGTGGGA  
10451 ACCTGCGGTT GGTGGAGCCC ATGGATGTGA AGGGCTGATA GTATGAGAAA  
10501 ACTCAGAGGT GCAGAGTTGG AGAGCACATC GGGGAGAATG TCAGCATGGG  
10551 TTAATAAAGA CACACTGTGG TTGGAGATGA TCACATGAAT GGCCACTTCA  
10601 AAAATGAATG GGTCTCATCC TCAAAGCAGG CTCTCCTGGG CACTGCTTGG

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10651 GAAGGTGCTA ATTGGAGCTT CAGGCAACAA TAATAAGGGG ATACAGGTGG  
10701 GGATCCTGCC ATGGGCGTAG CTTACTTTCT CTGGACTCTT CTGGGTCTTA  
10751 AGGCCAGTTT CCTCATCCAC TCAAAGAAT GACAGCAAGG TGAGCAAAGC  
10801 AAGGCAGGTA AATGAGGAGG ACTCTTTCTG GCTGTCCAAC TTTTCATCAA  
10851 CTTCCCAAAG GTTTTTGGAT GGGACATGAG CACTCATTCC TTCTCCACCC  
10901 TTTAGCTAGG CCTGTCAAC TCCAGGAGGA AGGTAGAAGA GGTCAAGGCT  
10951 GTGGTCTTTC ACTTATTCAA GATGTTTCCT TAGTGTTTTG TGTTTGGGTT  
11001 TTTTTTGTTC TTTTTTTTTT GACAGAGTCT TGCTCTGTTG CCCAGGCTGG  
11051 AGTGAAGTGA AGTGGCATAA TCTGAGCTCA CTGCAACCTC TGCTTTTCGAG  
11101 TTCAAGCGAT TCTCATGCCT CAGCCTCCTG CATAGCTGGG ACTACAGGCA  
11151 TATGCTACCA TGCCCTGGCTA ATTTTGTAT TTTTAGTAGA GACGGGGTTT  
11201 TGCCATGTTG GCCAGGCTGA TCTCAAACCTC CTGACTTCAG GTGATCCAGC  
11251 CACCTTGGCC TCCCAAAGTG CTGGGATTAC AGGTATGAAC CACTGCACCT  
11301 GGCCCTTATG TGTGGTTTTT TAAAAGAGAA ACTAAGCTGT GCTTCCAGAA  
11351 CCCAGTTTGA GAAAGTTTGA AGACCTGGCA TAGAGCCAGT GACATATAAT  
11401 TGTTAGTTGA AGAAAGAGAG CTCCTTGATC TGCAAATAGA GCACGGCCCC  
11451 ATATTTAAAT TCTGCACATT CTAGAAGCAT TTTGCAAGAA TCAAATGCTT  
11501 TGAGGATTTT GCTAAATAAC CATGGAGGAA AGCACTAGAC AAATATTTTC  
11551 AGATGGCATG AGAGTTATCA TTCATAGGAA TTATATTTCC ACTCCTACCA  
11601 CTTACTGGGG ACCCAAGTAA GAAATTACTT GGATAAGCAG AGGAGAATTT  
11651 AAAGTTGAAT GTGGTGGAAC TTATTATGGA AAAAATATGT TTTTCTGAAA  
11701 ACTGGATATG TGTATATATA TAAGTTCAGT TGTCAATTTG GAACCATCCT  
11751 TACTCTTCCT AGCTAAGGAT TAGCATACAT AGGTGCAACT TGACTAACTC  
11801 TGCCCTGGACC CAATTCAGTT ACCTTTTGGT GGGTAGGGTT CATGAAGAAG  
11851 CAGTTATTTG TGGAGTGTAT AGAAACCACT CTATTGTAGG TTCTTTAGTT  
11901 GGTACTTTCA AAATAAGTGA CATCCAAATA GTAACCTAAT ATTCCAAATA  
11951 TGGCTGCAAA ACAAAATTGTC GATTATGGAT GACTACTACT GCCATCTCTC  
12001 CATACCAGTC CATCTTCTGC CAGGCTGTTT GGTCTTGATT TGTGACCTT  
12051 TTAGGTTTCT CCCCATGTAT TCCACATGAC CTTCAACCAAC CCCACTTCTA  
12101 TCTCCAAACG TCTTTCTGAG TTGTGGGGAT GCAGATGTAT TCTGCCACCA  
12151 TCACAAGGGC TAACCGAGCC CTGGCTGCGG ATCTTCATTG TTGTTACAT  
12201 TATTTCCATT CTTACACCTT ACTTCATGTT TGTACACTAT TTTCTTACAT  
12251 TTGCTGTCTC TTCTAAACAT TCTTTGCTGC ATCCACTTTT TCTCTATTTG  
12301 TGCTCTAGGT GCTGCAGAGG CTAATGCTGG GTTTCCTTTC ATTCTCCTT  
12351 GCACCTCAGCA CCTCCCTTCT CAATTCCTTT TGCCATGTCT CCACTTTAAA  
12401 TCTTAACCTA CTCCAGATAG TCTTTTCTCT CACACTATTG GCATCTGTGC  
12451 TTGGGTTGCT TTCAGTCTAT TCTCTGATCT ATGATTTCTT TGCATGATCA  
12501 AGAAGGTGCC ATGAAAGGAT CCCTTAAGAA AGCCTGTCTT TTAGCCAGAA  
12551 CGAACTAGCT TCATGATAGC ACCAGGAAGA CTGATATCTC CCAGGAAACA  
12601 AACCACCTCAT GGTGGTGCTC TTTTTCCTT CACTATGAAG TGTGTGCTG  
12651 CCTGTATGTG AAAACGAGAG GGTTTAATTG TAAGGATGCA GCACAGATTG  
12701 GGACTGGCAT CAGAAAGCCA TTGGGGACTG AGGTAGCTCT AGAGACCGCT  
12751 TTCTGTCTCC AGTGCTCTCC CTCCTGGGTG ACATGTTTTT TGTCTCCTGG  
12801 CATCTCTGCT TCTCTCTATG GGCTTCTTTA TTATTTGCAG CTGCAATGG  
12851 TACCCCAAAG TCCTAGCTCA TGGCTCCTCT CTGCATATAT GCTTTCTGTT  
12901 CCTACCCACA AAGCTCTTTC TATTTCTCTA GTTTAAATTT TCAAGAGAAG  
12951 AAATCTGATT TTTTTTAAAC CTGGTCAATG CAAAGACCAC TGACCAATA  
13001 TGAGCTGGTT GCCCTGTGTC AAGTGCCCCC TTCTCCCACC CTCTTCCCCT  
13051 CCCCATCTGG TCTGTCAATA CTGAATGATG GAGTGGGAAA TTGAAATTGC  
13101 CATGGGAATT CCATGATAAG CTATCTAAAC AGTTTTATCT ATAAGTGGTA  
13151 GACAGAGTCA CTTAGAAGGG AGTCCCAGGT GAGACAGGCA CCTGTCAACT  
13201 CCAAACTGGC ACACATTCTA AGGTCTGCAA CACCCAGAG AGAGCACTGA  
13251 TTTGTAGTGT GCCTGTACTG GGGCGGTAGG CTGGAGAAATG GGAGAAATAG  
13301 CCACTTCAGA ATCCCCCAGC CCAAATGCAT CAAGCTCACT ATAGACTCTG  
13351 CAGCCACGAT TCAGCTGGCT TCTGCTCAGA TCAACAGAAA ACATTCTTAG  
13401 TGAATGATGC TTGTGGCACA TATCTCAAGG CTACCAGGGT CATTTCTTCC  
13451 CATTTACTTT TTCTCTGATC TATCCTCTCC AGGACACTAG CGTCAGAAGA  
13501 TAATCTTCCG TCGTTTTTCAG GTACACTATT TGGGTACTGA GTCACTTTCA  
13551 AAGCCTCTTT TTGGGTTTGG ATTTCCAGAG CAGCCTGTGC TGTAAAGCAA  
13601 GACAGAAAGC TTCCCTGCCA TTCATGCCTG CCAGGGATAG AATGACAGTA  
13651 CTCCTGAGGC TCTCCCTCCC CACCCCTCCC CTGCTGGACA GCTGATCTGC  
13701 TGGACTCAGC CAGAGCCAGC AGGCACCCCC TCTTTATCCT AGGAGCTGCA  
13751 AAGTTGATGC CTTTCCAGGA AATCCCCAGA AGCTGGAGTA TCCTCATCTA  
13801 CATGTGGCAC AGTGTATGGT TGTGTCAGGT GCTCATGTCC CATTGCATAG  
13851 GACTGGGGTG GAAAATAGGG ACCGTCCTTT TGTGTCAGCT CCAGTCAATG  
13901 AGTAGTGGCC ATCCAGGGGG CCATCTTGGG AAGGACTTGT GAGGCTGTAT  
13951 CTGCGCTCAG TTTGTAGTGT GAGAAGAAAA GGCCAAATAT CTGCCAATCC  
14001 TAGTCTGGG ATTCAAGATA GAAAGAACTG CATGGAGTGA AGAAACTAGG  
14051 AGTCTCCATT TCACTGAGAT GCATAAGAAAT GAAATTATTG TCACTATTTT  
14101 TTCAATACTG GGCCAATCCT AATAAGAAAA CCCTTTTTTGA GTCTCTCTTT  
14151 TCTTTATCCT ACATATAACA CAGAAGCTTT TTCTATTCCC TGGATGAACC

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14201 CACAGGGACA GAAATCTCTG TTGGACAGGT GAAGCAGATA ATTTCTTTAT  
14251 CAGACTAGAA TCTTCCAGAA GCACTGCTAA CCTAGTGAGT TTTGTACTCT  
14301 AGACAGGTGG TTCTCAAGCC AGCTCCCCAC CGCAGGCCTT TTTTCATGGTC  
14351 TGCCCCCTCCC TGTGGAACCC ATGTTTTAGG TTATTAGCTG ATAATTGGAT  
14401 TTCTATTTTT TCTCATAAAA TACAGCAAAA GATAGCTAGT GATATTATGA  
14451 TGAGTTAATG TAATTATAGC CAAAGCAGAG AGAAACAACA TTTTAATTAA  
14501 CCTGTGTGGA CTGCTGGAAG AATATAAACT TTCTATTTTG GGGGTTGAGT  
14551 AGAGACAGAA ATGAACACAG CCAAGGGCTG ACTGTCAGAG GACATTTAAC  
14601 TGATGTAAAA TGCTTTGAAA TTATTGGGCA CTCATTGTTT AAAGTTGTTT  
14651 TTGATGATGG TAACTCCGTA AGGGGATCAG AACATGCTGG AAAGAATGGG  
14701 CACAGCTTTG GTTACCTGGG CCTTACCACT GTTATTCAGG CCTCTGAGAA  
14751 AGCTTACTAT TGTGTATTATG TTTCTTACAT AATAAACTT CTAATATTTG  
14801 TATGAAAAACA TAGAATTCCA CTTTAAAGA TGTAAGGATT TTGTCATACC  
14851 ATTAGGTTGA CTATGATCAC TTGATTCTAG GTCTAAGAAA TATTAAGTAA  
14901 TTTACCCGCG AACACAGAGT TTTAAGGGTA AGTATCAAAA CCTTGATCTT  
14951 CTAATACCAC ATATTCTCAC TCATATGTGG GAGCTAAAAA TATTGAGCTC  
15001 AAAAAGGTAG AGAGTAGAAT TGTAATTATT AGAGGATGCG AAGGAGGATA  
15051 GGGAGAGGTT GGTTAATGGA TACAATGTGA AGTTATGTAA GAGGAGTAAG  
15101 TTCTAGTGTT TTGTAGCACT GTAGGGTGAA TATGGTTAAC AGTAATTTAG  
15151 TGTATATTTA AAAAAAATA GACAGGATTC TGAATATTCA CAAAGAAATG  
15201 ATAAATATTC AGCTGGGCGT GGTGCTCAC GCCTATATTC CCAGCATTTT  
15251 GGGAGGCCGA GTGGATGGA TCACCTAAGG TCAGGAGTTT GAGATCAGCC  
15301 TGGACAACAT GGTGAAACCC CGTCTCTACT ATAAATACAA AAAATTAGCT  
15351 GGGCATGGTG GCGCACACCT GTAGTCCTAG CTACTTAAGA GGCTGAGGCA  
15401 GGAGAAATCGC TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC  
15451 GCCACTGCAC TCCAGCCTGG GTGACAGAGT GACACTCTGT CTCAAAAAAA  
15501 AAAAAAATAA GAATGATAAA TATTTAAGGT GATAGATATG CTAATTACCC  
15551 TGATTTGATC ATTACACTTT GTATACATGT GTCAAAATAT CACTCTGTAT  
15601 CCATACATAT GTATAATTAT TATGTGTCAA CTAATAATAA AAGGAAAAAA  
15651 ATCATTTTCA TGTATTTACA AACATATGT AACCATTAG AATAATGTTT  
15701 TAAATTATAT CTAAGGGTGT GATAAAATTA CAGTATAAGA TTGTGCTTGA  
15751 AAAAGTGCAA TAAGAAGTAA ATATGTACAG ATGAGAAAAA GTGCAAGAA  
15801 CTAAGTCCTA AGCAGACTAT ACCTTTCCTA CTGCATGGTA CTTCTCTGGC  
15851 CTTTGTCTTT GAAAGATTTT GCACCCAGCA TGGCAAGTGG TTAGCAGAGG  
15901 CAGCCATTCT CACTTGTGCG TTGGCTTTGG GAGCCATATA TGTGTTTCTG  
15951 CTGGGTGTGG AGTGGAAAGG CTGCATGTTG TATTAATGCA TTGTTAAGAA  
16001 CCTCTAAGAG TGATTCTTTT TGGGAAGTGA GACTGACGGT CCGAATGGTG  
16051 GAAAGACAAC TTTTAATCTT TTAATTTACA CTTTGTGCAC TTTTAATGT  
16101 TTAACATGAG CATGCAATTC TTTAATAATA AAAATACAAA AAAATTTTAG  
16151 CCCTAGATCT TCTGATTTTA AACTGCATAT TCTTCTATT GTGTTACATA  
16201 TTTTAGCATG AGAATAAGGT TATGAAGCTG GAAGTAGCAG GCTCCCTTTT  
16251 CCTCATATGT AGGAAGTTAA GAATGCATTC TACGTTTCTT CTTTAAGGAG  
16301 TTGGCTTCTT TCCTTTTAAC ATAGGGGTAA CTGGGCCAG GAGTTTGGC  
16351 AAGGGCCAAA TAAAGTCCTT AATGCCCAGC TCAGAAATCT GGATTACCA  
16401 TCCTTGACTG CTGGCTCCAA CCCACCCTCA CCTGAGCTGG TCTGCAGAGG  
16451 ATTCTTGTGT GTGTCACTTC ATCACCAGCA ACTACCGACA GATGATGCTT  
16501 TGGCCTGCTG CTTGGGTAAC AGGGCGAGGC TGGCTCAGGA CCATGTTTTT  
16551 AGATCAGGGG ACCTCCTTTG ATGCCATGTC CATGGTGTCC GAGGGCAGCC  
16601 AGGATCAAGG GCTAGACGGG GCAGTGATGA GATGAGAGCA GGAGGGGCTC  
16651 AGCTGCAGCC CAGGAGAGC CTATGCCAGC CCTGTTGACC AAGGAGGACA  
16701 GAAGCAACAG GCAGCGGAG GCAGAGGGGT GAGTGTCTAT CGCTCAATGT  
16751 ATAATCGGCA GACATTTGGG GAGCTCATAC TGTGGGCTAA GCACAGGGAA  
16801 GAAAGGCACA GTCCTGTGCC TCAGGGAGGT CACAGTTGAT AGGGAAGACA  
16851 AGCATATGTG CTAGCTGCTA TAGAAGGGGG AACCCTGAG GGCTGTGGCC  
16901 ACACAGAGGA AACACCCCTT TCTTGTTTTT TTGTCAGGGA TTCAGTTTGG  
16951 CGTCATTAGA AGTGAATTGC ACAACCCCTT CCTCCAGTCA ATTCAGAAGG  
17001 ACTTGTTAAG CAGGAATGAT GAATTAGCTT CAGCTTGTGG GGCACACACA  
17051 GATGGAAGTA TAAGGTGGCC TCAGGAGTAA GTAAATCCCC ATGCAAGCTG  
17101 TGTCTTTAGA CCAGAGCAGC ACCCGGTTCT TCCCATTTT TAGTAAAGGT  
17151 GCCTCACACA CCACCAGGAC ACAATTTATG CCTGCAGAA GAATGAATGA  
17201 ATGAATGAGT GAATTCCTGG AACCTCTTCT GCTTATGTGC CACACCAGGT  
17251 TGCAGCAAGC CCAGGGACAC CTGGGACTGG AATTGGGCTC TCAGGTGTAA  
17301 TGGACCAAGG GCACCCACCA TTTTGCATTC TTCAGCCCTT CCTCCTCTCC  
17351 TGTCCCAGCT TCAGCAATAT CCACAGAGCC CTCTGAGCAA CTCTGAGCCT  
17401 CTCACAGGCC TGACGCCTGC CTGGGCACCA GCTCTTCAGA GGGTGTCTCT  
17451 GTGCTGCTCA GCTACCTCTG AGCCTGGGCT GCCTTTGATG CTCAGGAGAC  
17501 ACCCTGTAAT TCAATTAAGC CTTCTCTCCA GGGAGCATGT AATTATGTCC  
17551 TATCTGGGCC TTGTAATGAC AGCCCCCTGC CACTCTACAG GGAGTTGCC  
17601 TGCTCAGCTG CCCAGAACCT TTCCCTGGGA GGAACATAAT CTGCTTAGCC  
17651 CAGATTGGAC GCAGTTCTGC ACAGCACTTT TCCGAATGCC TCTGAAATGA  
17701 GTCCTCACTG ACAGAACGGG CCCACTCTGG GGAACATGAG GGCTCTCTTG

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17751 GTCCTGCACT GCTCTTTGCC ATACAGATCT GTCTGCCCAG GATTTTTCTT  
17801 GGGTGTGTAG GAGGCTGAGA GAGCTCCCTT TTCTTCTCAT GGCTAAATCC  
17851 CTTGGTCTTT CCAGCCCTCC TGGGGGTTAG AAGGGAGAGG GAAAAAATAA  
17901 AAGACTGAAC TTGTGTGTGT TGTCTTGTGT GTTGTGTGTG TTTGCCTGTT  
17951 TTCTATGTTG TCTTGTGGGG AGAGGGTATA AGATTGATTG ACAGAGTGGC  
18001 ACACCTCCCT TGCAAATTCA TCATTTGAAT TTCTCAGGTA AGATGTTTAC  
18051 ATTTCTCTGT TAAGATGCTC CAATTTCTCT GGTAAAGATT TCTCTGGTAA  
18101 GATGCTCATG AATTGGTGGG GGTGTTGGCG GGATGTGGGA AGTGTGCCTG  
18151 CTCTTTCTGA GTTTTGGGGG AAGTTGCCTT AATTCTCTGC ATGACTTTCT  
18201 TTGCTCCTTT GGGCTTCATT TCTGTGCAAT GTAGTCTGAC ATGAATACTG  
18251 CTCAGGGAGG TGTGCTTCC CACTGCCAC GCCACTGGAA ACCAGTAGCC  
18301 CAGGTTTACT CGAGTCTCC TTTTGAGGAA CCCAATTCTT TTCATTTCTT  
18351 TTATGTGAGA TCTGCCAAA ATGCCATTGG CAAGCTGTAC TGGGTTGAAT  
18401 AGTGTCTCTT CCTCTCCCAA ATGTATGTCT ACTCCAAACC ACAGGATACT  
18451 ACCTTATTTG GGAATAGGGC TTTTGCAGGT GTAACCATTA ATAGTTATGA  
18501 TGAGGTTATA CTAGATTAGA ATGGGCCCTA GATCCTATGA CTGGTATCCT  
18551 TACAAGAAGG CCATGTGATG ACAAAGACAA AGAATGGAGT GAGGCACCCA  
18601 AGGAACCTCA GAGATTGCTA GGAACACCA GAAGCTTGA GGAAGGCATG  
18651 GAACAGATTG TCCTCTCGGA CCTCTAGAAG GAATCAGTCC TGCTGATACC  
18701 TTGATTTTGG ACTTCTAGCC TCCAGACCTG TTGGGGAGAA TACATTTCTA  
18751 CTGTTTTAAG CTACCACGTT TGTGGCGATT TGTCACAGCA GCCATAGGAA  
18801 ACTAATACAT ACAACCTGCA CAATGCCTAC TCCAGCATTC CATAGCAAGT  
18851 CAAGGGCCTC CCAATTATGT CCAAAGGACT GATAGAAGAG CGACCTCTGT  
18901 GCTACTTGTC CCTCAGGACG CTGACCCACA GCTCTCAAGG CAGGAGTAGG  
18951 CCAGAGCTCA TTCACAACT TTGTTATATA GGGGTTCCAA TTGTAAACCT  
19001 TTTGAATTCC TGTTTGCAAG TAGATGAGGG TTGAAAAATA AATGGCCACT  
19051 TTCTCTAAGC CACATACCCC AATCTGTTTT GTTACTTCAT TACAGCTGTT  
19101 ATAATGGCCT CCTCTTCTAT CTTCCAATCT CCATAGCCCT GGTTCCTTGA  
19151 TAGTTCCTTT TTTTCTTTT TCTTTTTTGG AGGCGGAGTC TCGCACTGTC  
19201 GCCTGGGCTG GAGTGCAGTG GCACGATCTC GGCTCACTGC CACCTCTGCC  
19251 TCCAGGCTTC AAGCAAGTCT CCTGCCTCAG CCACCTGAGT AGCTGGGATT  
19301 ACAGGCACCT GCCACCATGC CTGGCCAATT TTTTGTACTT TTAGCAGAGG  
19351 TGGGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAATCCTT GACCTCGTGA  
19401 TCCACCCACC TCAGCCTCTC AAAGTGCGGG GATTACAGGC ATGAGCTACC  
19451 GCGCCTGGCC AGATAGTTCT TAAACAACCTG CCCAGAAAGT CCAGCCTAGG  
19501 CAGGGGCAGC CATGAAGTGC ATTGCTCATT TCTGCTTTTT GACCTTTTTCG  
19551 ATGGCTGAAC TCTAGGCCAT GGAACAACAG GACCCACTGT ATAGTTAAGA  
19601 GTCATTTTGT GACTAGGGAG AAAAAAAGG GCCTATTCTC CAAATCCCTT  
19651 TTCCCTCTGG AGTTCTCGG TGCCCTTAAAG CTTGTCTTGA GCTACAGGTG  
19701 TGTTACCTGC TTATCCCAA ATGCAGGCAT GTTACCTGCT TTCCTCTGCA  
19751 AAGAGAGGCA GGCCTGGCTG GGGCACAGCT GAAGATGTCA AGGCCAACCT  
19801 AAGGGCAGCC AAGCTATGGC TGTCTGTGAC AAGAGGAGAG CAGCGGTGAT  
19851 GGGAGGGTAG GAGGCATTGA GTTCATGTCC GGGTTTGCTT CCTACCTTCC  
19901 TATCACTGCT TGATGATCCT ATCACTGTCT TGATGAGTTC AAGACAGAAG  
19951 TTTGCCATCAT CATTGCCACA ATAAATCAC CAATAACAGA AGTGTGAAAG  
20001 CAGCGATGTG AGTGAAGCC CATATATACA CAGGGGGTAA TAGAGCAGCA  
20051 TGATTAATAA TGTGGCCTTG TTATCAGACA GGCTGATTTG GAGTCCAGC  
20101 TACTTGTGTG TGACCTGAAC TAGAGGAAGT TATCTAACCT TTCATTTTAC  
20151 TCATTTACAT AACATGGCTA ATAATAGCAC CTACCTTATA GGGTTATTGT  
20201 GAGGATTGAA TACAATTATG CAATATAAAA CGTTTAGCAT AGTGCCTAGT  
20251 CTAAATTCCT CACCAGGGGT ATGATGTACT AGTTTTAGT TAAGTAATTA  
20301 GTATCCTGGA CATGTCACAG CCATTTGACC TATCTGGGCC AGCGTTTTCG  
20351 TCAGGTTCCC CCAGCAGTAA TTGTATTCCC TCCCCAATCC CGGGATTAGC  
20401 TTTTAGGAAG AAACAGTTGA TCTAAAGATA GAAAGTCAGA GTACTGTCTG  
20451 GAGGAAGGTA GAGGAAATG TCATTATCTG GGTTCCTTTT GATGATGTCA  
20501 GGAACATGA CAGGCTGCTC CCAAAGACAG AGCAGCCCCA GGACAGGGAA  
20551 GAAGGTGACC TTGAGGTTGA CTCTCTGCA TCCCGATGTG GACGTATATG  
20601 ACTTGTTTTG GAGATGAAGG GAAAGAAAGA TGAATGTAG AAAGTGAAGG  
20651 AGAATAAAG AAGTGGGAGG AAGAAGGGCT GGGAGGAGGA TGGGCAAGT  
20701 CTTTCTGGTC TCAAGGATAA TTACATGTGA AATCACTTGC CAGTGGGACT  
20751 CTGGGGCTGG AGCAGCTACA ATAATTACAG TACAGGCTGC AGAGGGCTCT  
20801 TGGGCATGTC TTGGAGCAGC CTGTAGGCAG TACTGAGGCC TCTCTCACTA  
20851 GACCCATCTC CCAGATCACA TAGTACACAC ACCTTCCACC CCCGGGCTG  
20901 TTAATGATCA AAAAGCTTAA ACAGAACAAT TACAGCTTCA GAGTGAACC  
20951 ATATCTCTGG GCTCTGTGA TGAAGAACCA AAGCCTGTCA GGCTGGGGCT  
21001 GCTTCACATG GAGGGCCCTG CTCTTAATGG CCAAGTGATC TGGAGCAAGA  
21051 CCGTGACTC TCCCATAGTG CTGTGGATGG TGCTGCCTCT CCCCAGCAT  
21101 CCCCAGAAGA GGAAGTTCAG TAACTAAGGA ATTAACATATT CTCCAGCCTG  
21151 ATTCTGCTTT TCCCAATCAG GGCTTTATAC CTTTCTTTT CATCCCTATA  
21201 TTTGGAGATG AGTCACCTTT GCCTTCATTT TACCTAAGCA AGGCAGTTTC  
21251 CTGTAACCTA ATGAAGTGCC AAACAATACT GTGATTTATT TAGTACTTAC

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21301 TGTGTGCCAG GAATTCCAGC AGGTGTTGGA CATTATGAT GTATGATCCT  
21351 TACACTAAGC CTGCAATGGT GCAACCCAG CCCTGACCAC TCTGTGCTTC  
21401 CCTTTTCACA ACACAGCTTG TCACTAAATC CAAGTCAGGA ATTCCAGGTT  
21451 AGGCTTGAGT TGTGCAGAGC CCTTAACTGA AATTTGCCAT GGTGAGGCA  
21501 TGATTGCAAT CACTGACAAC TCCTCCCGGC TCTACACACC TACTTGTCTAT  
21551 ATTCACGCCC TGATCACGGC CCCACTCGCA TCTCTTCCCA CTTTAGAAGT  
21601 TCTTTCCTAT AGAACACGTT GCTGCTGCCC TGTTCTGGTC ACTGATCAGC  
21651 CCTGGCCTAA CCACTGGCTA AGCTTTGTGC TTGCACATAG CTGGTTGAAT  
21701 CGTATGTATT GCTGTTTGTG TACATCAAAA ATATAATAAT AATATCGGCA  
21751 ATTTTATGTG TTTCAATTCAA CATGAGGGAC CCAGCATTC TACCTTGTCG  
21801 CTTTGTA AAC CCTGCTGCTC TCAAATCTCC ACTAGCTGTT TCCTGAGCAG  
21851 AAGGAGATAA AAGGCTGGCT CACACCCCA TGTTTTTACT GGTACAGTT  
21901 ACTGCCACCA TCCAAGGCTG AAGAGACTTC CTTTGTTGTA GGGCTAAAAC  
21951 CTTTATGCTT GTATCTAAAT GTCTTCTGTA TTCCTTCC TCAAAGAAAA  
22001 AAGTACCCTC TTCTGCCAAC CCTCTCCCAT GCCAACTAAA CAAGCAAGCA  
22051 AGCAAAACAC AAAGAAAAGG TGATATTACA GATGCTGCTC AGCCTATGAT  
22101 GGGGTTTACAT CCTGATAAAC CCATCACAAG GGATGTAATT CCATTGCAAG  
22151 TTACAAATAC CATAAGTCAA AAATGTATTT ATTTTCATATA ACCCACAGAA  
22201 CGTGATAGCT TAGCTTAGCC TACTTGATCA TGTTTCAAG ACTTATATTC  
22251 GTCTACAAGT GGACAAAAAC ATATAAAACA AAGCCTATTT TAAAAAAGG  
22301 TGTTGAATAT CTCATATAAT TTATTGAATA TTGTAAGTAA AGTGAAAAAT  
22351 AGAATGTTTT TCTGGATACT CAAAGTATAG TTTCTACTGA ATGCATATCA  
22401 CTTTTTGCACC ATCATAAACT TCAAAAATTG TCGGTCGAAC CTTCTGAGT  
22451 CAGGAATCCT GTCTGTACAG GGTATAAAGG AGGAAAGCAT CAGCTTTGGA  
22501 GGCAGGTGGA CCTGTGTTTG AACCCCTGATT CTGCTAGAGC TTGACAATGC  
22551 ATATTCTGTT TCTATTGCAT AACTAATTAC TACAACAAC ACATTATTT  
22601 CTCAGTTTTC ATGAATCATG AGTCCAGGCA CAATTTAGCT GCAGTTAAGG  
22651 TGTTAGCTGG GGCTGCTGTC TTATCTGAAG CATGGGGGTG GGGGTGTGGA  
22701 TTCCAAGGTC AGGTGGTTGT TGGCAAATT AATTTTCTTG CAGCTATAGA  
22751 ACTCATGGCT TGCTTCTTCA AGGACACGGG GAGAGAGAA CTCTCACATC  
22801 TTTTAAAGGG TTCACTGAT TAGGTCAGGT CCACTCAGGA CAGTTTCCCT  
22851 TAAAGTCAAG GCTTAATAGT CAACTGATTA GGGACCCTAA TTATATCTGC  
22901 AAAATACCTT CACCATTGCC ATGTAACATA ATCATGGCAA ATAATCACAG  
22951 GTCCCAAATG TTCACAGGTC CCACTCACAC TTGAGGAGG GGATTATATA  
23001 GGGCATGTTT TGTGCGAGAG AAGGAATCTT ACAGCCACAT TGAATCTGT  
23051 CTTCCATGCT ATTTGACCTC AGGCAAATG ACTAATCTCT TGAAGTTCA  
23101 ATTTCCCTTAC CTGGAATAAA AGGACAATAA GATCAGCCAT ATAAGGCTAT  
23151 GACAAAGACT AAATGAGATA GAATAGGCTG GAAAAGTCTT GCAGATAGCA  
23201 GACACAAGTA TATAACAATT TCCCTCCTAC TGTTCTCTTT GTTTTTCACC  
23251 TATCCTGCAG TCTCTGTCAC TTCAAATACC ATAGAAAACC TTTCCAAGCA  
23301 GCCCAAATCA TGCCCCCAAA TAGTCACGTC TCATTATTTA TAGCAGTTAT  
23351 GTTCCATAAA GTTAGACAAA ACTCCGAATG AGTGAATCCT AAAGCGTTGC  
23401 TCGTGGAGGA AATACAGGCT GCTGGTCACA ATATTTTAT CAACTGATCA  
23451 ATATATACCT TGTCTTATGT GTGTTTCTGC TTCAAGACAC TTTATTTAAT  
23501 ATATACGTTG ATTCATTAAC TCTGAACCT CTAGGCAACA GCATTATAAC  
23551 TCCTGCCTTC ACAAAGCTTA TCTAACACAC ACATTTCTCT CTCAGGCACA  
23601 TCCAGCCTT CTGCACTTA GGATTCAGCA GTATGCTTAA GGGCCATTTT  
23651 CAACAGCAAA CTCATCAGCG CAAACACAAA CATGTGAAAA ACGTAGCACT  
23701 AAAGAGACTG CAAAAGGAC ACTGGCTTAC AGCATGGAAG CTGGAAGGAG  
23751 AAGGCAGAGA ATCACCTTGT TCCACTTCAG CTATGAATAT GCAGTCAGGC  
23801 CACCCAGTCA TTCAAATTTT ATAAATATAC TCTAATATAT ATATAAATAC  
23851 CAGGCAGGGT TATTTTTCCT CTCAAGTCAT TTTTCTAATT TTTTTTAAAT  
23901 GAATAGATAG AAGAGCTGAA GTAAGGGTCA GGAGCAAGAG CTCTGCTTCC  
23951 TTTTCCCTTG CTGGGCTTCG TTAGAGAGCC ATCATCTCCT CAATATGTCT  
24001 CCCAACTCTT CTAGGCATTG GATGAGTTTG CTGCAGATAC GAAACCCAAC  
24051 TTTGCCAGTC ACTTCATACT AACAGGTGAA ATGTAGTGGA GGAGCCTTTT  
24101 GAAGACAGGG ACTCAGCCCC CCATTAGCCT CATTCGAGAC CTAGATTCCT  
24151 GCCAAATTA ATTTGGCTGG AACTTCCCAG CCATGGCATT GTCGACATTA  
24201 CACATCTTCC ACTGTAATGT CAATTACCAT TTTATTTCAG CGAATGCTGG  
24251 AGAGTTAATG TTCAAGTGGT TAGAGCTGGC TACGGGTGGG CTGAACAAGA  
24301 TGCTTTTTC TTTCAATCCC CTGCCTGTGG TGAAGGATTG TAACCAGCCC  
24351 TGCGTGGCAG CACTTTGAAG CTCACCCAGA GTGCTCCTGG GGACATCTTC  
24401 TACAGAGCCT ATCATTGGA CATGCTGTCT TCTGGGCTG TCTTCTCTTC  
24451 TTCTTCTTTC CCTCCCTCCC TCCCTCTTTT CCTTCTTCTC TTCCTTCTTC  
24501 CTTTCTTCTC ATCTGCTTTA AAACCAGCTG CCTTGAGTGC TTGTCTTGGC  
24551 GCCCTTCATT AGTGCCATTG CAATCATCCC TCCTGCCTAC CCTGCTAACC  
24601 ACAGCTTGT AGTCCACAAC AGCAACAGCT GTGTGCTGGG GTGCAGCAGC  
24651 TGGAGGGCCA AAGGTAGGGC TGGGGGACAG GGTGTTGGGA TGGTTTTCTG  
24701 GGGCAGATGA GTTTATACGT TTCTTTCATG TCCCCTTCCCT CCCACATAGA  
24751 CTTTTATTTT CCCAAAGGAA AACAGAAAAC AATGATCTGT TTGACAGTGT  
24801 TGCTATCATT GGGCATCAAA CCTATCATCT AAGGGGAATC CCCCTGTATA

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24851 ATCAGTCAGC CAAATGGAGC AGGACCCTGT GTTTTGTAGC TGATACAACA  
24901 GGGCAGCATC TCTAGTGAGG GGGCCAGGGC TTCTATTTCC TTCATTAAAA  
24951 AATGAAACAG CAGACCTGAT TCCATATTTA GAGATTACAC TTAGTTGCCA  
25001 CTGTGGGTGT GCAGGCACCA ACCAAACCCA GTTGGCACC G TGTCTTTTTC  
25051 TCTGCAATGA TGTATTGAAT TTAATAATGG AGGTATATGA AATTCAGAGT  
25101 GATTGGAACT GAAGGTTTAG GGGCTTTGTG TAAAAATGAT ATGTAAGGGA  
25151 TTTGGAAGTA GGTGAGGGAT TCTTCCCAA TACTTATTCA ATTTTGGAGT  
25201 CAAATAACCA AGCATTTTACA AATAGCCAAA AAAGAAATTG AAAGAGGGTT  
25251 TAATCCAATA AATTTTCATG CCTCATATGA ACCACATCTT ATAATAAGAA  
25301 TTATGCTTTT TCATTTTATA CTCAGTTAAC AAATATGATT TGTGAGCACC  
25351 TGGTAAGTTC AGGGCACTAG GCTGAAAGGG GTTACCAAAT GTCTTCATTT  
25401 AACAAAGTCC AGCTGAGCTC TTACAGGTAC CAGAAGCTGT CCTGGGCTGT  
25451 CATATGAAGA TGAATGTAAG AGTGTGTCAG GCCTTCAAGA GCTTACAGTG  
25501 TGTGAGAGA GATCAAACAA GTGAGCCAAT AAAATGATAC TGCCATTTTA  
25551 GAAATAGCCT GAAATTCATG GAGTTCACAG TCTTGTTAGG AAAGTGAAAC  
25601 ATAAACCTAT AAGCATTAAA AAATAACTGT TGAAGACAGT AACGGAAGAA  
25651 TGCAACTGGC AACTGAATGA TATAGGTTGT GATGACTGTT AAATATCATG  
25701 AAAAGAGACC ATGATGAGCT GAGGCACTCC AAGAGACTTC TTTTGGAGA  
25751 TATGTTTGGG GCCAAATCTT GAAGATTAA TTGCTTTTTT CTTTTTTTTT  
25801 TTTTATAGTG GAGTCTCGCT CTGTTGCCCA GGCTGGAAGT GCAGTGGCAT  
25851 GATCTCTGCT CATTGCAACC TCTGCCTCCA GGTTCAGCG ATTCTCCTGC  
25901 CTCGGCTCCT TGAGTAGCTG GGATTACAGG CGTGTGCCAC CATACCCAGC  
25951 TGATTTTTGT ATTTCTAGTA GAGATGGGGT TTTGCCCTGT TGGCCAAGCT  
26001 GGTCTCAAAC TCCTGACCTC AAGTGATCTA CTCGCCTTGG CCTTCCAAG  
26051 TGCTGGGATT ACAGGCATGA GCACTGTGCC TGGCCTTTTT TTTTTTTTTT  
26101 TAAAAA AAAA AAAAAA AACAGGAAGT TTTCGTTAGT TTTTTTGT  
26151 GTTTTACTTC CCATAAAAA TCTTTGTGTC ACATGGAGGT GAATGGAAAG  
26201 AGAGGCTGTG GCAACAGACG GGAGACTTTT CTGATATCAG AACCCAGTCC  
26251 CATAGACCAG AATGTATGCT TTCAATCCAC GTTGTCTGGG TCCATCCTAT  
26301 TGAGTGCCTC GCGCCACAG CGGGGTATGG AGAAGAGTCA GACACAGCCC  
26351 CAGTCTCTAC GTAGCTCACA ATCCAGTGA GAGACGGAC TCAGAAACAG  
26401 ATAGAGATGA AGCCATGAGA TCAGTACTGT CCGAGGCCAT GGCCACGGTT  
26451 TTGTGGGAAC CCACGAGAGG GAATGACTAA CTGTGGGGAA GAAGAGGGAG  
26501 AGGACCAAAA TGCAGGGGAA GTGCTCACAG AGGATAAGTA AGCAGTGAGG  
26551 TGCCATGAAA TGAGTATACA CCTGACAGCC GTGTAACAGC TCAGAGCCTG  
26601 GGTAGAGGGG AATAGAGCTG CTGGTTCTCT GGGGGGAAGA GAGGGGTATG  
26651 GGATTCCTGA ACAGAGCAC CAAAACAGC AGGTTATTGG AGCTGTTAGT  
26701 GCTCAGATCA GCAATGGGTG CACAACCAA CCATTCTCCT AGGGATGAGT  
26751 TCTTTCTGT GGTAGAGGGC TTCTCAGCCT GGCTTCTCCC GAGAATTACC  
26801 CGGGAAGCTT GAAAAGTACT GATGCCTGGA ACCTACCTCC AGAGAGTTGG  
26851 ATTTTCATTGT GTTGACGTGG GGCTGGGATA TCAGTATATT GTTTAAGCAC  
26901 TCCAGGTGAT TCTGATACGT AGCTGTGATT GAGAACCCTT GCCCTAAGCT  
26951 ATCCATCTGC ATCCAGGGG TGCTCCAGG CCCATCTGTT TGTAAATGGA  
27001 CAGGTGTCTT GAGGTAACAA ATGTGCCAAG GCTCTGGAGC CAAGCACGCC  
27051 TGGCTCCTTA GTGCTACTT AGTGACCTCA GGCAAGTTAC TAAATGGCTT  
27101 AAACTTTACA AATCCTTAAT TTGTAAAATG TGGGCAATGA TAGTACCTCC  
27151 TCACAGGATT ATTACGAGGT TTACACGGAA TACTCTCAGC TCATAATAAG  
27201 CACTTGCACA GGCCTCATGG GCTAGGCCCT CAAAACCTAA CGCATCTACA  
27251 GGCAACAGCC ATATGAAAGG AATTTTATAC CACCAAGTCA AAAAATCTGT  
27301 GAGCACTGCT CAGAAGCAA AGCCTGTCTC CAACAGCGCT CATTTAAGGG  
27351 GTGGGCGAGC TACAGAGAGA AGAATGAGCC CCCACAGGGT AAGCTGGGGA  
27401 AAGCTGGGGA CAGAATGAGA CTCAGGAAAT CACTTGAATA TTGATTATAT  
27451 TTGTGCTCAA TAATAAAATA ACGAAATGAG TACAGCCCTA GACCTAAACA  
27501 TTGTGGGTGA GGCAAAGGCA ATGCGTTAAT TTTGCATCCA CTGAGGAAAA  
27551 ACTCTAAAC GGTGACTTCT TTTTAAAGGG ACCAGAGAA TCTAGATTAT  
27601 ATTTAGTCTA AGTCAATACA TACGACAGAA CCTTGCCCTC TAGACTTGAT  
27651 AAGAAAGAAG TAAAAATAA GAAAGAAATA AAAACCCCTC CACCAAAATA  
27701 CTAACATTCA GATAATGACT TTTTAGTTAG GTCTCCTGGA GAGGAGGTTT  
27751 CTCAGAAAT GAATAGATTT CTCTCTAGT GCAATCATCA AAAGGTAATG  
27801 CATGGACTTA AGTGTGATCC CCAAGAGAAA ATCAATGACC TTTCTGTGTT  
27851 TGCTTTTGAG AAAATCAGCC AGTCTATGGT TAAATTAGAC ATATTTTTTC  
27901 TCCTTGGTCA AGATTAGTGG GACCAAGAA GCAGTCTTAC ACTCCTTCTA  
27951 GCAAGAAAT ACCTGATGCC TTATTTTACA CAAATTGCA AAGTTGTATG  
28001 GACGTTGTAT CTTATTTTAA GGAGAACTGG TGATCAAATG ATGACTATTT  
28051 CAATAGTGGT TCATTTACAC CACCACCCTC ACCCCACATC CTGCTTTCAC  
28101 CTGAATCTGA ACGATCATAG TCAGTCTGAG ATTCTGAAGG TTTGAAATTC  
28151 CTTTCTGAG CTTCTGCAAGA ACAGCATCTC CCAAGAGAGC TCAGGGCAGA  
28201 CTGTCTGGGA GAGATTGGAA ACCTGTCTTT TGCAGTAACA TGAATTGGTT  
28251 GAATGGTCAC CCTCCATATC AGGCCTGCTT CTCCCATTGG GTTTCTGATC  
28301 AGCCCAACTT GGGTCTCACC CTCTGATTT CTCTCTCCTG GCTCATATGG  
28351 GGCTGCACTG GCCATTAGGT GCCAGGCTTG GCTCCGTGGA ACCCATGGG

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28401 CAGCTGGGCT CTGTGGAGCC CTAAGGCAGG GCTCTGGTCA CTGGTGAGAG  
28451 GGAGGCCATT GGAGTCACTG GGGTGGACCT ACAGACCCTA GGGTTAACAG  
28501 CTAGGTGGGT GTCCTCTTCA GAGAAACGGG TTACAAAGTG AAAGAAAGTT  
28551 ACACTGTGAG GTCAGCCAGG GAGGAAGACA GAGAGCTGAT ATAAGATAGG  
28601 TACTGATTCC CTGGGGATGT GAAAGGAGGG TAATATTCCCT AAAATGATAG  
28651 CATTTAGCTT CCAGTATACA TTAATTGATT CCTGATATTC ATTAAAACTA  
28701 AACGCTATTT CCTTGATGTC TCATCCAAAG CCGCACCCTT CTTCCCACTA  
28751 AGTCTGAGGG GAGCTTGTTC TGTTGACAAG TGTAAGAGGT TGAAGAGGGA  
28801 CCCATGAACCT CTTTTGTCTT ACTGAAGAGA TCCACAGATG GAAACAAATG  
28851 CTCCTACCAC ATTTATGAAC TGCTGCTTTG CAGTCCCCTT TCTGCTATCA  
28901 TGCACAGGAA CTGACTAAGC TCCAAAGCCA GAGGATGTAA ATCTCCCTGT  
28951 AATAAATGTA AGTCATTTAT TAGCTACATA CACTTCAGCA AGTCACCTAA  
29001 CCTGCAAAAT TCAAGCATGT GAATCTTGGA TCTTTTCATGT GCTAGCTGTG  
29051 AGACTTTGAG AATGTATTTT AATGTCTCTT TGCTTCTTTT TCTACCCACA  
29101 CAATGGGTAT AATAATGTCT ACCATATATC TTTGCAGCAA GGTCTAAATG  
29151 GGGTGATACA TGCTGAATAC ATTTCCAACA GAGTCTGTGC AATGATAAGC  
29201 TCTTTCCAAA TGTTAGTTAA AGCTAACCAA CTAACCCACC AACAAACCAA  
29251 CCTCTTAGCC AGGACTGATG GAAGGAGTCT GTGAGAGAA TGCATTTAAA  
29301 CACTTGGCAC CATGCCCTGAC AAGAGTAAGT ACTCGATAAA TCAGTTATTG  
29351 TTATTATCGC ATCGGTATTA TGACCATTAT CCTCTTCTCT ATAGGCTTCA  
29401 GGTTCCTCTG TCTTTTATC ACAGCAGTAT TCCAGCAGAA GCCTTTGATT  
29451 TAACCTAAGTC TCTACTGTGT GTGTGGCTAG ATGCTATAAA GCATCCAGAG  
29501 AAGTGAGAA TTTGTCCTGC TTTTAAGTAG CTTATAGTCT AATTAGGGGG  
29551 AAGTAATCAG ATAGAAAGGA AACTAACAA ATGCAAAAGG AAATCATAG  
29601 TTTGTGGTAA ATGCCAGGTG CTGCTGATAG TGGCTTCAGA GAGATCTCAT  
29651 AGATGCTATA GGAGGTCAAA GGAGAAGCGT GCAGCTTGAG CTAAGTTTTC  
29701 AGGGAAAAGG GTGAAAGAAT TAGTCATTAA TGTACACCTA CATTACCTGC  
29751 CAGACTCCAT TCAAAAATAT TCTTACCAA TCATCACAAT ACCTTGTTGG  
29801 TAGGTACTAT TACTATTTTA CAGAGGAGGA AAGTGAGGCA AAGACACATT  
29851 AAATAATTTT CCCAGAATCC CAAGGTGTGA GGTGGAGCAA GGACACAAAT  
29901 CCATGGCTCT TAGTCCCTCC TAGTATATCC TGCAAAACACA TCTGGAATTA  
29951 ATGCAGAGAG GAAGGGGAGA GGCAGTGTTC TGCAGGAGTT CAGAGCCATG  
30001 ATAACCCCTT TTGTGTGGCT TTTGGTAAGT TATTTTACCT CTTACCCCTCT  
30051 GTTTCCCCAT CTGTTCAATG AAGGTTGTAT ATACACACAT TATATGGCCG  
30101 CTGTAAGTGT GCAGTGATAT GATGCATGGG GACTCAGTTT ATGAGGCAGT  
30151 GTGAATCTCG AAGGTATCAC AATGGGACAG GTGTTTTTTT CTCCACTCAT  
30201 TTTCTCCGAA AGTCTTTTGT TTTGTTGCC TCCCTCTTTG GGGCATATGC  
30251 TTTTCAGCTA TACCTTAATG ACATCAGAAT CTGCAATTTT CTGGCAACTT  
30301 TTGTGGTTAA AATTATTTCT CCCTTCCATT TTAAGCACT AATAGCAAAG  
30351 GTATTAGGTG CAAAATGATG ATAAAAATAA TTGCAATTTT TACCATTAAA  
30401 AGTCATGGCA AAACCACAAT TACTTTGGCA CCAGCTGAAT ATTTTGAAAC  
30451 TCCCTACTCT GATGTTAACC AAGTTCATGA TTCAAAGAAC TTGCAGAGGG  
30501 GTAGGGGAGT TTAAGGGGAA AGGGGGAGAT GCCTGGGTTT GTCACACACT  
30551 CTGTCTTTCA TCCTCTATTG ACATGTTGGT TATTTGGAGA TGGTATTTCAG  
30601 TTTCCACTATA GCCCTCAGT CACTGTAGAC CCTCTCAAAG GGGCAATCAT  
30651 GTTTCCTTTA GGTCAAGTCC ATTCATCTAA CCCCTCTCCC GGGGGCATCA  
30701 CCTGTTTGT GTCCAGCAGT GTCTGGCCAA ACTCACACCT CCTCTCACC  
30751 CTCTAGCCCT TATGATCTGC TTTGGGGAGC CATGGGAACC CCTAGTTTCC  
30801 TCTTTTCATAC CCACTGAGAT TCACAAGTAA CTAAGGTCAA GGCAGGGCTT  
30851 CATTGCCCTT CTGAGATAC CTTACGCTAC TGTTCTCTCT CGCCTGGCTG  
30901 GCTCCACACT CCAGCAGACC TTCTGCTGGG CGAGAAGCTG CAGGCCTGAA  
30951 TCTCTGTGTT CTCATATGGC CCCAACTCTT GGGATTACAC TAGCTCTTGT  
31001 AAGAACTCAA TGCTCTGCTC TGCTCATTTC GATGCCATCA AAGAGGGCTT  
31051 GCAAGTTACC AGCTGGGAGT GAACACCAGT GTCCTCTTTT TAGAGGTACC  
31101 CCTAATCTTT CTGAACAATT TTGCTGGCAC CCCTTCACTT GGCTTTGCCG  
31151 GGGTAAGAGG GGGCACTTCT CTCCTTTCCC TCATGAAAGG AGGGAGAGAA  
31201 GCCAAAAATC TCCCTACTAG TCAACAACCT AGGCACCCCT CTTCTCTCC  
31251 TCTATTTTAT AGACTGGGAA GGGAGTGATG GTTGTGGAG GTGGCAGAGC  
31301 CAGTTTCACT GCCTTTTGTG AAGTCTTGAA GGAGGTGTCT ATCCTCAACT  
31351 GCTGGCTTCT GTCCTTAAGC CTGGGGAGAA TTAAGTCTCT TTTGCCTCAG  
31401 TTTGGCCTC CAATTGCCAA CATTGGGACA GCAGGAAAAG TTCCATCCAA  
31451 CATCCCATTA AATATGTAAT GTGTATTAGC ACAGCGCTG GCACTGGGCA  
31501 GGTATTTTCT AAGTGATAGC CAATGCGAAG CCTACTTTAT TATTTTCCCT  
31551 TTTGCTTAAC CTACAAGGTG TCTAAGACCA TTTGTTTGTG CACACATAGT  
31601 AAGATAAACA GCACTGAGAC TGTTGTCCTT TCTGCCCTGT GTCCTTATCC  
31651 CCCTGGGAA TCTGGAAAGC CAAGCCTAGA CACACTCGTT CCACAAATGT  
31701 TTACTGAAGC TGTGTTCTAT CAAAGCACTG TACAGCTACA AAGACCATCT  
31751 TTTCTGAAC CCAAACCAGG CCACATGGTT GGAATAACTT CAAGTATGGA  
31801 GACCAAGAGA AAAGGTGGTT GTTGTGAGCA AAGCTCTGAG TCCACACCTT  
31851 CCAGGAACCT ATAGTTGATG CAATGGTGGG AGAAGTCTGA ACCTGGATTG  
31901 AATCTGCTTG ATTCCGATGA ATGGTGACAGT AGGCAGAGCC ATGAGTTCAG

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31951 AGCAGGAAGA AACCACCTGGT TCAAAGAAGC ATCTGTACACA TCGAAGCTGC  
32001 TTTATAGTCT GTTGGGAAGC ATGCATAATA ATTTATTCTT TCTTTCTTTC  
32051 CTTTGGTCAA CAAAGATTTC TTGAGTCCCT ACTATGTGCC AGGTACTCTT  
32101 CTAGGTACTG AAGATGCAGC AGTGAACAAA GAAGATACAA TCCCTGCCCCA  
32151 GCGGAGCTTA CATCTAGTTC ATCGAAAGTC CCTTCTCTAG TGGCTGCTCT  
32201 CTTTATTGGA GAAACCATGG GCTGTTCTCC TCCCATCCTA GGGCTGTCTGG  
32251 CTCCACAGAG GCAACACAGTC CATCAGGATG CTCTGCCAGC CACCCACCCA  
32301 CTAAGACCA AGGGTTACGC TGTCAGTGTG AGCAGGGACA CTCCCGTCTC  
32351 TGCTACCTCC TTTCTCCTGA AAACAAGATC TCAGGGAACA TCTGCCATCC  
32401 ATTTTCCCTC CTGGGGAGT GACAGGAAAG GTGTATGGAG GAGATTGAGC  
32451 GGAGTGATGG ATTGAGGCAC TGTGAAAGTG AATCATTGCC TGACATGGGA  
32501 ATGAGGAGAC TTGCTTAAAG GACAAGCCAT GCTAAGTCAT CCATCGTTCT  
32551 CCCCTAAGGA GGTGAATTGA AGTTCCCAT TTTCCAGGG AGCCAAATTA  
32601 ACAAGGTGCT GGGAGATTTC CAAATTAGAA AAAAAAAAAA AAAAAGGCAC  
32651 CACCAGCTCT GCAATCAGAG AGGCTGTGTA GTTGTTTTTT GGAGCAGATC  
32701 ATTGTATTG GCATCTAACC TTGAAATAGA GGAGAAAGCA TGGAATTTCT  
32751 GCTGAAAAC CATCCTTCTC TGAGCAGGTG GTACAAATAA GCATCGTTGT  
32801 GTTCTCAGAG GCAGGAACCA CATTTGCACC TTGATACCAA CTACCTCAAT  
32851 TGCTACAGT CTGAATTTTC ACAAATTGCG AATTAGGAAA TTGTTGCTCA  
32901 TTTTACAATT TGGTTTCCCT CAGGATTCCCT TTTAAGTAGC CAGCTACCCC  
32951 AGTACTTTTG AAATATGACT TGCTTATAAA AATTTGATAG GCTTGGCAGC  
33001 GTGGCTCACA CCTGTAATCC CAGCACTTTG GGAGGCCGAT GTGGGGTGGA  
33051 TCACGAGGTC AGGAGTTCAA GACCAACATG GTGAAACCCCT GTCCCTACTA  
33101 AAAATACAAA AACTAGCCAG GCATGGTGGC ACATGCCTGT AATTCCAGCT  
33151 GCTCGGGAGG CCAGGCAGCT AGGCAGGAGA ATCACTTGAA CCCAGGAGAT  
33201 GGAGGTTGCA GTGAGCCAAG ATCATGCCAC TGCACTCCAT CCTGGGTGAC  
33251 AGAGCAAGAC TTCACTCAA AAAAAAAAAA AAGATATATA AACAAGTTTT  
33301 TATAATATTC TCAATATGAA CTAGTAGAAA AAAAGCATGT GTTTTtaggt  
33351 CTTAGAGGCC TGTTTCCAG TTTTATCTCT GACTCTAATG AGGTATAGTA  
33401 TTACCTACAT TGATTAGCCC TTCTATACTT CATAGGAGAT GCTCCAAGAC  
33451 TGCTAGCTTT CTTCATTCAA TAAAGAGAGA TATAACAGGA TGGGCCTTAA  
33501 AAGTAGCATG CATTTCTTCT TTCATTCACT CATTCAAAAT ATTTTCATGC  
33551 GTGAAAATGC CAAGGATGTT TGGTCAACCA ACTCTTCCCA GACCTTGGCT  
33601 GTGAGCCTGG CTTAGAACAA TTCCATTTTA ATGGTCCATG CCCTCAGGCA  
33651 CTTGTATTCT AGTAGAAGAG CAAGGTAAGA AAACAGCTTA AAAAGTTAAA  
33701 CAGTTTTAGG TTGAGATGGG TGTTGTGAGA AAAATAAGCA GGATGCTTTG  
33751 AACCTATGCA GGTAGGAAGG TCTGGAAGG CCTCTCTGAT ATGGTGATGG  
33801 TTAAGCAAAA ACCAAAAAGA CCAAGAACAC ATGGAACACA TGAAGGGCTG  
33851 GAAGAACAGT GTTTTATGGG GAAGGACTAG TACACACAAA GGCTGCAAAAG  
33901 GCGAGTGGGC TCATTATGTT CTAGAACATG CCAAAAAGCG GGTGCAGCTG  
33951 GAGAGGGAGT AAGATGGCAC AAAAGGTGAG TGAGGTGGAC AGGAGCCTTA  
34001 TCACGCAGGC TTACACAGGC TCTCAGAAGC CTGCGTGTG GGTTCCTTGG  
34051 GACTACCGTA ACAAAGCTCC ACATACTGGG TGGCGTAAAA CAACAAAAAT  
34101 GTATTGCCTC ACAGTTCTGG AGGCCAGAAT TCCAAAATCG GGTGCTGGCA  
34151 GGGCTGCGCT CCCTCCAAAA CCTGTAGAGG AGAATCCTTC CTGCTGTCTC  
34201 CCTAGCTTCC AGTGGGTTGC TAGCAATCCT GGGCTGGGTG ACTCCAGCTC  
34251 TGCCTTGGTT GTCACAGGGC GTTGTCTTTG TGTGTCTCTG ACTTCACATA  
34301 GCCCTCTTCT TCTTCTTTTT GTGTGTGTCT GTGTGTGTCC ACTCTGAGGC  
34351 ACAGAAGTTT TTATTTATTT ATTTATTCAT TTATTTATTT CATTGATAAA  
34401 CATAATAGTT ATGCATAGTT TTGGGGTACA TGAGATATTG GATACATGTG  
34451 TACAGTGTGT GATAATCAAA TCAGGGTGAT TGGGAATATCC ATTCACCTCC  
34501 AAACATTTTC TCATTTCTTT GATTGGGGAC ATTATAATTC TTCTAGCTAT  
34551 TTTGAAATAT ACAATAGATT ATTGTTTACT ATAATTTCCC TGCTGTACTA  
34601 TCGAATACTA GAACCTATTC CTTCTGTGTA GGGTGTACTT TTGCACCCAT  
34651 TAACCAACTT TTCTTTATGT CCTCCTTCCC ACTTCCCTTA CCAGCCTCTG  
34701 GTAACCACCA ATCTACTCTC TACCACCATG AAATCAACTT TTTTTTTTTA  
34751 TAGCTCTCAT ATATGAGTGA GACTATGCAG TGTTTGTCTT CTGTGCCTGG  
34801 CTTATTTTCA TCAACATAAT GACCTCCAGT TCTGTCCATG CTGCTGCAAA  
34851 TGACAGGATC TTATTTATTT TTTTATGGCT AAATGGTATT CCATTTTGTA  
34901 TGTATATCAT ATCTTCTTTA TCCATTTCAT CACTGATGCA TATTTAGGTT  
34951 GATTCCATAT CTTGGCTATT GTGAATAGTG CTCCAATAAC CATGGAAGTG  
35001 AAAAATATCT TTCAACATAC TGATTTCCTT TCTTTTGGAT ATATACCAG  
35051 TGGTAGGATT GCTAGATCAT ATGGCAGTTC TAACCTTTAGA TTTTAAAGGA  
35101 ACCTCCATAG TTTTTCCTCA TGGTGGCTGT ATTACTTACA TTCCACCAA  
35151 CAGCATATGG TCATCTCCTT TCTCCACATC CTTGCCAGAA TTTGTATAT  
35201 TTTGTCTTTT TGATAATAGC CATTCTGACT GGGGTAAGAT GATATATCAC  
35251 TGTAGTTTTG ATTTGCATTT CCCTTATAAT TAGTGATGTT GAGCATTTTT  
35301 TTATATACCT GTTGGCCATT TATATGTCTT CTTTGTAGAA ATGTCTATTC  
35351 AGGCTTCTG CCCATTTTTA AGTGGAATTAT TTGTTTTTTT GCTACTGAGT  
35401 TCTTCCAGTG TCTTATATAT TCTGATACAC AGCCATCTTC TTATGAGGAC  
35451 TCCAGTTATA TACGATTAGA GAGGTCCACC CTTTTTCAGA ATGAAATTAT

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35501 AGCTTAACTA ATTACATCTG TAGTAACTCT ATTTCCAAGT AAGGTCACAT  
35551 TCTGAGGTAC AAGGGTTTAG GACTTCAACA TATGAATTCC AGTGGGACAC  
35601 AGCTCAACAC ATGACACCAT GGTAGGGAAC TTTATTCTAC TTGCAAGTTC  
35651 TGAGTGTCTT ACGCAGGTAG ATGGACTGGT GTGATGTATG CTTTAAAGAC  
35701 CGCTGTGTGA AGATGGCCTT AGGGTGATGA GGATGGAAGT TGGAGACTAA  
35751 TAAAGGACTA AGAAAATGCT AAGAAAATCC AGGTGAGAGG TGATGATGGC  
35801 AGAACTAAGG TGATAGCAGT AGAGAGAAGA GAAGTGGATG GAGATTAGAC  
35851 ATCTTTTGCA GAACGAATGA CAAAATACCC CTATGGATTG GACATGGGAT  
35901 GAGGAAAAGG AAGGACTTGA GGGTGGTGTC TAGGCTTTTT ACTTTAATCG  
35951 TGAAGGGAAG CTGGTGCCAT TTACCTTGTT CGGACAAACC TGGAGAGGAT  
36001 CAGGTTAGGG ACTGCGAGTG GTATGGACGG CAAAGGAATG GGAAGAATGC  
36051 AGGGATTAAA AATTGGAAAT CCCCTCCCC AGTCAACAAT ATCTTACTTT  
36101 TATCTGAAAA ATACTAAGTA AAAAAGCATC CTTTGTGTTG AAAGCTCAAT  
36151 CCTTGTGTTA ATGAAGACAT CTCTGGGAGA GGAACATAG TGAGCACCTT  
36201 TCCCAAAAGC AGCCACTGAT TTGGAGATGA GACAGAGTAG CATACAGGAC  
36251 ATCAGAGAGA ACATGCTCAG GACAGAAAGA GCAATGTAGG ACAAGGCAGT  
36301 GTCTTGGCAT CACAGTCTTT CCTCCGACTG GCTGTGAGCA AGTGCTCAAT  
36351 TTAATTCAT CTCACTGCTG GGTGAGGACA AGTGCCCAA AGCAAATTGA  
36401 CAAAGTAGG AGCATGATGG AGTTAGAAGG TAGCAAGTTC CCTCCACAGA  
36451 GCCCAGCTGG AAAGGAAGAT AGAGGGGAAG TTGACCCCTG GGGATGGGGA  
36501 ATAGGGTGAG AGGAGAACAT GAAACTGAGA AAAGGGCTTT GAGTGAAATC  
36551 TAGGCTAAAA GCTAAGGTTT CTTTGAAGAC CCACCATGTA CCCAACATGA  
36601 CCAGGGCTTT CTCTTGACTT GATTATTTTT GATACCCCAT CTTCTTCTGT  
36651 ATTCCTGGAA CTAGCTCTCC CAAGCCCAG AATTGTGCTT CTATCAGAGC  
36701 TGGGTTTTCA TCAGAGTCTC CCCTTTATCC TGTATCTCTG TTGCCCTATT  
36751 TTGTTTGAAT TCCTGCCAGG TCAGCTGAAT TTGGGCATTT GGGGTGAAAA  
36801 ACCATCAAGT TTGGCATCCT GGCTTTGGCA CCTGGCACAG TGTGACCCCA  
36851 CTGGTCTCTC CCTCACATTT GCTGTGGTCC GTGCACGGAA TTTGTCAAAA  
36901 GACCTCTCTA GTATCAGCTT TCCTGCAGCC TCAATGCACC TTGTTCTGAA  
36951 TAGGATATTA CCCCCAAGA GTATATTAGG GCATTTTCCT ATGCCAGAAG  
37001 GGGTCTTAG GCCTCTTGCA GTTTTTCTG GGTGACAGTG AAGGAGGAGG  
37051 TGGCTGCAGA GCTTACTGCC TGTGGACTGA CCACCCAGG GCCTGGTGTC  
37101 AGGACCATT GTCCAGCCTG TTGAGTGAAG GTCATTCTGC CTAAACTGTA  
37151 AGCACAAGAG AGAGTTCAGC ATCATTTGCA TCCTATTTTA TTGTCTTTCT  
37201 TCTCTTTCTT TTCAAGGCCT CATTTTTTTT GGCTTGAACA AATGGTAAAG  
37251 GCCATTTTAT TACAGGTACC AAGCCAAACT TTCCTTGGTT TTGTGGCCAT  
37301 CCGTCTGGGG AAGGAAGTAC TCCTTTACTT TAAATAACTT TAAAAACATC  
37351 TGTTTGGTCT CAGGGGCTGC AGCTGGAAG ATTTTCTAAC TAATACTTGT  
37401 TTTATGGGGG TGTTTTGGG GGGGTTTATT GAGTGTCAAA CCTGGCAGTA  
37451 AATTAGAATC AGAAGACAAC AGTTAGTGAT AAGCAGAGAA GCCAAGGATG  
37501 TTACCATAGG CAGGCAGCAG AGAGAGGGGA ATTGGTGGCT GGCCCCCAA  
37551 AAACAGATTT GAAGATCTCC TTCTGTCTAT TAGTGAATCC CCAAGTGCCT  
37601 AAGGTGGGCT GTGATTACTT GAGCTCCTGT CTCCACTGTC TCAGCTCACT  
37651 TGCCCTGGGG TGGACACACA ACACACATTT GCTCATAGCA TCAGGTATTCT  
37701 AGGAGCAAAG AGCTGAATTT ATCTGGTTAA TTTAGATACC CCTACCCCT  
37751 CTTTTAACAC CAGATTGCCA GGATCATGAC CTCAAAAGG TACCCTGAAA  
37801 TGCAATTGTC AAATGGGATG AAAGATTTCC CGTTTCATCC ACATTTGCCT  
37851 CCTGAGCTAC TTACAGCAGC AGGTCAACGC AGCCAGAGCC CACCTGCTTG  
37901 CCCACCATGC CCGCACACAG ACAATGCTGC TTCTGTGGCT GGAGGTCGGA  
37951 ACACCTCAGC ACTATCTCAG TTTGGCTGCA GATCCTCTGT GTGCTTGGTA  
38001 AACAGGTTTC CTCATCTGTA AAATGAATTG GCTCTTCAC AACTTTTTTA  
38051 AAAGCACTAA CATATTAGGA CTCTCACTAA ATACTCAAAT GCTAAACTCA  
38101 AATACTAAAA GAGTGCAAAG GGATGGGCTC CCAAATATTA CAGTGAAGGC  
38151 TGCAGCATTT TCTGACCTTG CTGCTTTTTC TGGTGAGTGG CTTTTATTTC  
38201 TTAGTTTGGT TTCTTCTCTC CCATTCTAAT CAAGCAAGAA GTGACCACCA  
38251 AAAGGGGCAC TCACCAAACC AGAACAAGCT AGTTCTTTCA TCTTTAATTC  
38301 ATTGCAACCA AACAGATGCC ACAGAAAGAG CCAAGGGCTC CAGGCTTTAG  
38351 CTCACGCTTT GCCATTAACT ACATATGTAA GTCAGCCATG CTGGTCTGCA  
38401 GGTCTTGTCT TTGCATGATC AAGGGACAAC TTGGAAGGTC TCCAATCACT  
38451 CTATTCCCCC AGATGGAAT GTATTCACTT ATTTCTGGA GATGCTCTGC  
38501 CTCCTCCCAG TTAAAGACAG ACCTTGACCC ACCTCCACTT CCTTCTCTGT  
38551 GGCCCTGTCT TATCTGTCTT CTGTCTCTTG CCTCTTCAAT TGTCTCTCTA  
38601 CCGTGTGTTT CACTTCTGAG CTATCACTGT GATCCCCCTG ATGTTTTTTC  
38651 TAATGTCCCT GAACTTCAAC CTGATTTTCA CGCATATACA ATGTCTTCTT  
38701 AAACACTTAT AGACTCTGAC ACATTCGTGA ACTGACACAT TTCCCTTTAT  
38751 CAAATGCAAT CTAAGAAGCT CACAGTTTCT CTCAGTTTCA ACAAGAGAAA  
38801 TCAGGAGCAC TTGAATTATA CAACTTGACA TTATTAGGCG TGATGTCTGA  
38851 TTTGTCTCTG TCTGCCCCTG TCATTTCTGT ACTACCTTTT ACAAAACCTC  
38901 TCCTATGACC TGTGCTCTCC TCCAGCTCCA TTTGAGAACA CCTGCTGTAT  
38951 ACCCTGTGGG CTAGCTTTTA TTATGTTTCG CTCATATGAT AAGAAACAGG  
39001 CTTGGAAGTT AAATTATCTA CCCCAGGCC ACAGCCTGGA ACCTAGGATT

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39051 CCAACCAAC CTTGTCTGAT TCTAAAGCAT AGCAGAGGCT CCATACTCTG  
39101 CCTCCCTCTT CTACATCATT TCAGTTTCTT CACTTTCCCA CCTCCAATTC  
39151 TCACCCAAAC TGAATGTCTC ACAGTCTCTG TGCCCCACT TTGCTCCATC  
39201 CCTTGGCCCT CTGCAGTCCA AGCTCCATTC TGAGATCATC CAAGGCTTCT  
39251 CTTCTGTGTT GATCCTTGGC CTCTTGGAG TCTCTTCTC CCATGTTCTC  
39301 CACAACAGAG CATCTCTCTG ACTGTTTCA TTCTGCATCT CACTCTTTCA  
39351 TCAGTATCTT TTTCTCTACC ATGCCCCATA AATTGGGTG CTCCTGAGGG  
39401 TCCTGTCTT GTCCCTGCT TTCTTGTGT ACAACCTCCT TGATCTACTT  
39451 CATCTACTCA AGTTTGGTCC ACAATTCTA TATTGTGAAG ATTCAAATCT  
39501 GCATCTCTAG CCATATATCC ATTTGCCTGC TAGGCATTC TACCTGAATA  
39551 TTTTATAGGC ATGCCAGTGG CTCTTACTCT ATGGCTCTTA CTCTAAGTCT  
39601 AGACTACAGC AGAAAGCAAT GCTCTTTTAA TTAAGGCATA GTGCCTCTTT  
39651 CAGAATAAAT TACAGCATAA AACCAGGCTT GCTGTGCAGC ATTACAATTT  
39701 GTCATTAAAA CTCCTATTCCT CTGCCCAGAG TAAATGAGCC ATTTACAGCC  
39751 AGGGCGCCAA GATGGACTGT TGTATATTTT TCTGCCTTTG TATTATGAGT  
39801 ATTCATGGCT CTCCTCAGAC AAGCTCCTGG GGATCCCAG TGGAGTTGCC  
39851 TTAACATGCA GGTCAATTAG CCAGGCTCAA GGGTAGTTTC CTGGATATTG  
39901 GTATCCCCCT TGCAGAGGAC TGCAGGAAAG CTGAACAGT TTCCCCAAT  
39951 GTGGGTGGTG ATCTGAGAA ATATCATTTG TATCTGCATG TGCTGTCTCA  
40001 CACACACTAG CTCACATGTG CACACACACG TGCATGCACA GGACAAAACC  
40051 AAACACAGGG CAACCCAGCA TCTGCCCCC AGCCATCAGC ATTGTTACAC  
40101 CTTTATAGGG GCGGGAACA GGTGGTCAG CAGGTGAACG TCAGTGAGT  
40151 TGAGAAAAGT TATTAAATCT TAAATCTTAA AGGAAAGTTA TTAAATCTCT  
40201 TCTAAAATGC ATGCATAGGC GGGCTCAGTA ACTAACATGC AAATGTTTAG  
40251 GGTCTGAAGC TCCTACCGAT AATCTTTCAG ATCTCAGAAT TCCAGCCCCCT  
40301 TGTGCTGTTT TGGGTGTCT GACACAGACG AAGCAGAGAA CAGTAGAATA  
40351 AACAGCTCAG TAAACAATTC ATTGAGGAA AGAGAGTGAG AAGATTCACT  
40401 GGACAGCTAG AGGAGGAAAT ACTGCTGGTG ACTATGGAAG AAATTTGCC  
40451 TAAGGCCTGC AGGCAATAGC TTGGTCTTAT TTATCTGGT GTCCACCCT  
40501 CTCCTCCAAC ACATACTGCC CTGGCAGGTA CGTAGAAGAT GCGTGAAAT  
40551 ATCTTTTGAA TTGAGCTATG CAAAAAATAC TGGATTCTGC CCTCCAAGAG  
40601 TTTACTGTTT AGTTTCACAG AAAGCACATG CCTCCTTTC TCTGCCTCTT  
40651 GAAGACTGAC CTATCTTTCA AGGCCACTGG CCCAATCTG TTTCTAAGT  
40701 AAGACCACTG AGTCAGTGGT GACCTCTCCT TCTCCCTAAC AAAGTCTGAT  
40751 TTACTTGAAT ATCAACTAT CTCCCTCTTG GCCTGTGAAT TTCTGTGTT  
40801 AGGGAACATA TCTGATTTAT CCTATCTCT TCCACAGTAC CTGGTGATAA  
40851 ATGCCCAATA AATGCATTGA AATATTCATG AAGCTTACTA AATGCTCTGC  
40901 CTTATGAGCC ATGAATATA AAGTGCCCTA AACTTTGTTT TTCTCTTATG  
40951 TAAATAAGG ATAATAATAA TGACACCCCT ATAGGATTGC TGCAAGGATT  
41001 AAGTGTGATA ATATATATAA AACTCTTAGC ACAAACACCT GGCTCACAGG  
41051 AATAGTAGCT ACTACATAA TGGTAACTTC GAGGGCAAGT TTTCTCAGAG  
41101 TTTATTTAGCC CTCCTCACC CTGTGTCCAG GAGTGCAGAT CAGAATGGTC  
41151 AGATCCAGG ACACCAAGTT TTCTGTGGGA GCTTCCCTAG GAATATAACT  
41201 AAGGAATTTA AATCAGGTT AGCTCATGCT GTTACACTCT CTCTCTCCAC  
41251 TCAGGCATTG GGTGTGGCTT TTCCAAGCTT GAGAAGGGTG TGATCTGAGA  
41301 TGGGCTTGGG TATAGAGGGG AATTATATTT AGGTCTACCC TGTATAGGAA  
41351 AAAGTGCCCT CCCAAAGTCT CCCTGGCCTA AAGTATAAGA GATATGTGTT  
41401 GGGATTTAGA CCCAGAGCCC AAGCAATAA TGGGACCCCC TTCTCACATG  
41451 TGGCTACCTC CTGCTATCAC CACAACAGCT ATCATACCCA TAACTACAAC  
41501 AGAGGCCAAT TAACGTGGTG ATAATTGACA AATGTCAAGA CATCCTACAT  
41551 TGAGGCACAC TGTGCGTTT GCGTGAGCTT TTAATTTGGT AGGGAAGGAA  
41601 AACTTTTATA CCTACACCTA TCATGGAAG CAGAAGGTAA GAGCTAAAT  
41651 AAAGGTATGC CAAGAACAAA GGCAGGAAAG AAGGGTTTAA ACAACTTGAG  
41701 GCCTGATCCA TTGATTAGTG AAGAGGAAAC ATGTTCAAAA ACCACTCTAT  
41751 AACCACCTTC TCCAAGTTT TTATAATTTT GCTTCTTCGG ATATCTTCTC  
41801 ATCATAGTCT TAAATGCCAT CAAATTAAT GAAAAATGCT AAAAATGCAA  
41851 CCACTCTAAG AGAATGGGT AGATGGGAGA TGGCTTTGTT AAAGAAGTCG  
41901 GTCTTAAAGC AAAAGTAGGG CTTTGTCTAG GTAGTATGGA AGGAAGGACA  
41951 TTTTGGTCA AGAGAAGAAA GTGCAGGGCC TGTGAGGAA GGAATGAGTA  
42001 GTAAAATATG GCTAGAACAG GGTGCAGAGG GGAAGAACTT CAGAGAATGA  
42051 CCAAATAAAC AGGCTGAAAG GTGTAGACAT TATAGGCAAT AAAGCAACCA  
42101 CAGAGGTTTC TAAGCCATAG GGTGACATGA TAGATCTGTA TTCTAGAAAA  
42151 GTTAGTTTTG CAGCAGTTGT GTCCATTGAA AGGGACAGGA TAAGGGAGAT  
42201 AGATAAGAAG ACATGCTATG ATGATAACTA GATTTGGATA CCAAGTGGTA  
42251 TGGTGGAAG GAATGAGAGA ACAGGGTCAC AGATGAATGA CTGCCAATT  
42301 TCAATCCATC ATACACAGGAT GTATAGGATT GCCCTTAAGT AAGATGGGGA  
42351 ATCCAAAAAC GAGGAACAAG TTTGTAAGGT TTTGGGGGCC AATGATGAAT  
42401 TCCATTGGG ACATGTTGCT TTGGATATAC CAATGGGACA TTCATGTGAA  
42451 AATGATCTCG GCAATCCTAT CCTGGAATTC AGGATAGGAT CAGAATGAGG  
42501 GACACAGTTT ATAAGGTAAA CAGAATGGAG GTGATATAGA AGATAAGGGC  
42551 ATAGATGAGC TTACCAAGG GGAGAGTTTA GAATGAAAAG AAAAGACCAA

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42601 AGGCTAAGCC TGTGCTATTC TTTCTCCTCA CAATACGCTT CAGACCTGGG  
42651 CACAAACCAT CAGTGAGTGT CATGATAACA CTACTGTGGG CAAATCCCCC  
42701 CTCTATAAGG GCCTGATTTC CTCCTCTATA AAATAGAGGG TTGAACAGGG  
42751 TGGTCCATAT CCTGTTAATT GTGTTTGGAG AGCACACAAC AAACCAGCTA  
42801 CTATCCAAAG GGGACATCCC GAGGCAGGAC TAAGCAAAGG AAATCCAGCA  
42851 CAGGGAAAAC ACTTTCTGGT GCTGGTCCCA GTTAGGCAGC GTTCAGTTTA  
42901 ACCCATCACC ATCACCATCA GTAGCTTTCA GCTGCTACTG ACCACACTTA  
42951 TAGGAAGAAA AACAAATTAGA ATGGAGAGCT AACTCTTTGG AAATGGTCAA  
43001 AGAACACGGG TCTACAAAAC CGTCAATAAA GCGCTAAGAT GCCTGGGCGG  
43051 GGTCAAAAAG TCTACCTGGG CGGGGTCAAA AAGTCTACCT GCTCAGCATA  
43101 TGGGGGCCAG ACATCTGACC TTTACCAACT CCACAATAAC CACTTCATCT  
43151 ATGGATCCAG TCTTGGTATC ACCTAGTCGC TGTTTTCAAG TAACAGAATA  
43201 TTTGGTTCTC AATGGTAGGT GACTGGAATA CAGCTTACTT TCTCCCACCC  
43251 CTACCGCCAA TCCTTTCTGC CCCCTTAGT TTAATTTGCT TTGTAAATTA  
43301 CTTGGGAATA CATTTGGGAG CCATTATAGG GAAATAGAAG GCAGACATGA  
43351 TGAACAGAAT GCAGGTGTT TTTTATTACT TCACATTGTG CTCACAATTT  
43401 AGGAGGAATT CTAGAAGCCC CTCCCAGTGG CCAGGAATTG GTCATAGCAT  
43451 GAATAAACTC AATATAGGTT GAGTATTCCT TACCCAAAAT GCTTGATACC  
43501 AGAAGTGTTT TTGGATTTTG GATTTTTTTT TTGAATATTT GCATTATATA  
43551 CTTACCAGTT CAGCATCCCT AATCCAAAAC TGAAATCTAA ACTGCTCCAA  
43601 TGAACATTTT CTTTGAGTGT CATATTGGCA CTCAAAAGGT TCCAATTTTG  
43651 GAGCATTTTC AATTTTGGGT TTTGGGATTA GGGATACTCA ACCAGTGGTA  
43701 GGTTTGGGAT TATATCAGCA TGCTAAGGTC AAAGAGACCT AGCTGGGAAG  
43751 GGTGGGAGGA ACATGGAATT TTCATTCTCT GGGCACCCCT TGAACAGTCT  
43801 TACTATTAGG GCCCCAAATT TGTTCTAAGT GTGTGTGTGT GTGTGTGTGT  
43851 GTGTGTGAGA GAGAGAGAGA GAGAGAGAGA GAATTTTCTT TCTTCTTTA  
43901 TATCTTAAGT TCCTCAGGAC AAAATTTTGG GTTTCTTTGT ATTCTCCCTG  
43951 CAGCTCCTCA TGTAATTCTA AGCAAATAAA GGAATTCATT AGGTCCTTGA  
44001 TTTCAAGAGC CTCCCAGTTC TCATGTAGG AGGAATCTTA GGGTGGCAAG  
44051 ATAAGTTGAG GGACTTTTCT TCAAGCACAT TTCACAAGTA AGAGAAAATG  
44101 TTGACTGTGT ATATCTAAGA ATGGGTGGGG CTCATGATG CCCCCCTAAG  
44151 TTAATCTTTA CTATTATTGA TTGATTGATT GATTGATTGA AGAAGCAATG  
44201 TTTTGATTGA TTGAAGAAGT AATGTTTCCA ATGGGTACAG CAGACTGGAG  
44251 CAAAAGAACA AATGAAAGA AAATACATTA GGCTTTCCAT TTCTTCTAAT  
44301 TCTGGGGCAT CTGATGAAGC TTTGGATCCC CCAAGGTAAG AGCTGGACTC  
44351 TGCTGGTGAA AACTCTTTAG GAAAAACAAA AGAATATTGT CAGAATCTGA  
44401 TGCACCTTAG AAATGATGCA GCAGAACTGC TTTATTTTCT AAAAGGTGAA  
44451 ATGGAGACCC AGAGAAGCAA AGTGATTTGT TCATGATCAT ACAGCTATTC  
44501 AGTAAAGGCA AGACTTCTGT GATCCACTGT CCTTTCTTCA AACCAAGTGT  
44551 TCTCAACCTT GGGAGCTTTA AAAAAGTGT AGTGTTGGAT CCATCTCAGA  
44601 CTAATTAAT CAGAACCCAT GGGGATGAGG CCCAGACATG AGTGGGTTTT  
44651 TTGTTCTTTT TTAAAAAAAA GCTCCCTAGG AGATTTCTCA AAGAACTGAA  
44701 AATAGAAATG CAGCATGATC CAGCAATCCC ACTTTTGGGT ATCTACCCAA  
44751 AGGAAGATAA ATTATTATAT AAAAAAGATA CCTGCACTCA AATATTTATT  
44801 GCAACACTAT CCACAGTAGC AAAAATATGG AATCAACCTA ACTGTCCATC  
44851 CATGGATGAC TGGATAAAGA AAATGTGTAT ATATACACAC ACAATGGAAT  
44901 ACTATTTCAT CGTAAAAAAG AACAAAGTCT GTCTTTTGCA GCAATATGGA  
44951 AGGAACCTGA AGCCATTCTC TTAAGTGAAG CAACTCAGAA ACAGAAAGGC  
45001 AAATCCACCA TGTTCTCACT TACAATTGGG AGCTAAATAA TGCATATGCA  
45051 TGGGCACAGA GTGTGGAATA ATAGACATTG GAGACTCGGA AGGGTGGGGG  
45101 GAATGGGAGA GGGTCAATGA TGAAAAATTA CTTAATGAGT ACAACGTACA  
45151 TTATTTGGGT GATGAATACA CTAAAAGCCC ACACCTTTACC ACTATGCAAT  
45201 ATGGCCATGT AACAAAATTG CCCTTACACC CCTTAAATTT ATACAAATAA  
45251 AAATAAATAA ATAAAAGCTC CTTAGGGCTG AGAACTACTG CTCCTGTCCT  
45301 ATGGGTCCCC AGCTTTATTT TAACCTCAAA TGAGTTTAGA AAAATTTATG  
45351 AACCATTTTA AAAATATTTA TTGAGTATCT CCTGTGTGCA AGGCACTGTG  
45401 TTATGTTAAG TGGCTGAAGG GAAATTAGAC TGGGGAAAAA GACAAGGTCA  
45451 TTGGCTAGGT TTCAAATAA TATAAAAGAC ATAACAAATA AGAAAGGATG  
45501 CCACCTTCTT CCAACCCTCA TCCCTCTTCC TTTTGACAGT TGCAGATGTT  
45551 GCTAATTCAT TTTGGCACCC TTTTCTCTG ACCCAAATAT AGTCTTATAA  
45601 ACCTTTTCAA CCCACGGCTC TAGGCAAGTA TCACCTTTTG CTCTTTTGGC  
45651 ACCAGATCTC TTGAACACTA TTTACTGGTT TTGGAAGAT TATACATGTA  
45701 TGCTGGAGT TGAATGACTG AACAGAGCAA TAATAAGAGT TAAAGCAAGA  
45751 AAGACAGGCC TACAGGAGAT GGCAGAGGGT CTTGCCTGTC AGGCATTGAT  
45801 TTTGAACCTC ATTGCATAGG CAATCAAGAA CTATTGAAGT TTTTGACAAA  
45851 AAGACTATAG ATGAGATTAA CCTGGTTACC GTAAAGGACA AAGTGATTGC  
45901 AGGTAGAAAT AGGCCAGCTT CATAAATGAA TCATCAGGAT ATGAGAAGCA  
45951 AGGGCTTGAA CATGAGAGGC CATAGTGGGA ATGGAGGGAA AGGGACAATG  
46001 TGAGAAGCAG TGAAGGAGAA GGGCTGATTG AGTAAAGCAG TGGAGAAGAC  
46051 AGTGAAAGAT GTCAGATGAC TACCATGTTT GGCAGACTGAG TGAGGGAAGA  
46101 GGTGGTGATG ATATTACTGA AGAGAGAGGC AAGGGGTGGT CACTGGATTT

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46151 AGAGCAGACA TTATCAACTT GTGGTGTCCA GACATTTAC CCTGGGAGAA  
46201 ACCTGTTCTG AAGTGGCTTC AGCATCTCTG AGGTCAGATT CCTAGTTCTA  
46251 CTATTTTTCT ACTGACTGAA ATGGAATCG AGTAGGCAAG GCTTTTGATT  
46301 TGCTCTAGTG GTCTCTCTG TAAATGGGG GTGTTTATAT CCATAGTCTT  
46351 ATCACAGGGC TATTGGGGG ATTAAGTAAG ACAAGTGTGG CAGAGCTTTG  
46401 TAAACTGTAA TACACTGTGT ACAATTGGAT AATTATGGAT TCTTCTGACT  
46451 CATCCACATG GATGTCTGCT GACCTGGGG GACCGGAGCC TGGGAGGGAG  
46501 GCCAGACCTG GAAATGGAAA CTTGAAAATG TTCTCTGTAG AAAAGATAAT  
46551 TAACATTGGA GGATGGTTAA GTCCTCTTAA ATAGATGTCA GAAAAAATGG  
46601 AGGTCATGTA GACAGAATGT TGGATAACAC TACTTTGTAA AATATTTTAT  
46651 CTTATTTCCA TTATAAAAAGA AAAAAAGCTG GGCTGGGCAC GGTGGCTCAC  
46701 GCCTGTAATC CCAGCACTTT GGGAGACTGA GGCGGGTGGA TTACCTGAGG  
46751 TCGGGAGTTC AAGACCAGCC TGGCCAACGT GGTGAAACCC TGCTCTACT  
46801 GAAAATAGAA AAATTAGCCG GGTGTGGTGA CAGGTGCTGT TAATCCTAGC  
46851 TACTCGGGAG GCTGAGGCCG GAGAATTGCT TGAACCCAGG AGGTGGAGGT  
46901 TGCAGTGAGC CAAGATTGCA CCATTGCACT CCAGCCTGGG CGACAAGAGT  
46951 GAAACTCCAT CTCAGAAAAA AAAAAAAT AGACAGGAAA ATAAAAAAG  
47001 CCACCTCACA TAGTCTACTA CCACCAACA CATCATTAAC ATTATATTTT  
47051 TTTATTTCCAT GCTCTTTGTT TTTAATATAA ACAATTACTT TTAAGGGAAA  
47101 ATGAGAAAAA GAGAGAGTGA TAAGACTTTA TTTTAAAGG TGAATAAAT  
47151 CTAACCATGG AGAGTATTTA TAAATTTTTT TTTTGTGAGA CAGAGTCTCG  
47201 CTCTGTCACT CAGGTGGAG TGAATGGCG TGATCTCAGC TCACTGCAAC  
47251 CTCCACCTCC CGGGTTCAAG CAATTCTCCT GCCTCAGCCT CCTGAGTAGC  
47301 TGGGATTACA GGCAACCGCC ACCATGCCCT GCCAATTTTT TTTTTTTTTT  
47351 TTTTTTTGGA GATGGAGTCT TGCTGTGTCG CCCCAGGCTG GAGTGCAGTG  
47401 GCATGATCTT GCTCACTGC AAGCTCCGCC TCCTGGGTTT ACGCCATTCT  
47451 CCTGCCTCAG CCTCCCAAGT AGCTGGGACT ACAGGCGCCC GCCACCGCAC  
47501 CCAGCTAATT TTTGTATTTT TAGTAGAGAC AGGGTTTCAT TATGTTGGCC  
47551 AGGCTGGTCT TCAACTCCTG GCCTCAAGCA ATCCTCCTGC CTCAGCCTCC  
47601 CAAAGTGTCT GAATTACAGG TGTGAGCCAC CGTGCCAGG CCATAAAATA  
47651 TTTTTTATAG ACAAGTGAGA GCAGAAATCA CAGGTTCTTA TGAGCAGGAA  
47701 AATTTTGAAG GTCATCTACT CTGAACGTTT TTTTGTGTTG TTGTTTGTG  
47751 TTGTTGTTTG TTTGTTTTTG CTTAGTTTAC ATTTATATAA TACCCGTTAT  
47801 GGTCCAGGCC CTGGCTAAG CGCCATCCAT GCAATATATC ACAAGATATG  
47851 CCCAGCAATC CTAGGAGGTA GGGTTTATTA CTACCCATCG TACAGAGGAG  
47901 GAAACTGAGT CATAGAGTTT TAGTGTCTG ATCCTGGTCA CAGAGCCAGG  
47951 AAGTGGCAGA GCAGGCCAGG CCAAGTCTGT CTGACATCAG AGCTCATCAG  
48001 AGCCCTCCCC ATTGTCCTTG AACCAGTAAA GATGGAGTTC TTCTACAGGG  
48051 GTGGTTGGGG GACAAGGACC CCATGGGTGT GTCTGAGTCA GAAACATCTG  
48101 CGAGTGGGCT GAGAAATGAG TCTTCTGTGA AAAAGAGCAA AAGAAAAAAT  
48151 GGGTCAGGAG CCAATAATCA TTGTCCATCT TTGTGTGAAT GTATGGTGTG  
48201 GGAGTGGGAG CAATAAACGA TTCTAAGGTC ACACAGAAAA GATGCCACCT  
48251 TCTCCATCA CATAACCGCCC CTCGTCCCCC AGTTTTCTCT GAAATAGCTC  
48301 TTCTTTTGGC TCTATCCTGG CTTCTTACA CAGGGGTGTC CAGTCATCTC  
48351 ATCCTGGTGG GACAGGGATA GAGCTGTGGC AGTGGAGATG AGGAAGCTCG  
48401 CCTCCTAAGT GAGTCTGAAT TCTTAAATAT GGAGCCACTC CATAATCATT  
48451 TGGAGTGAAT ATTTGGCCAT GGCCCTTTTT CTTGCCAGCT GAGCTATGAA  
48501 AAAAGGATGT CCTAAGACCA GAGGCTGTGG GACCATTCCC AGCCCTTGCA  
48551 GGAATCAAAG GAGCTGACAG AATTGTTTGT TTGTTTTTTT CACAAATTGA  
48601 AAAAAAATAT GTAAATTTT TGAAAAGAAA GCCTCATTGA AAAGAAATCC  
48651 CTCTCCCCAG CTGGGCTCCC AGGCAGCCTC CTGCAGAAC TCCCTAGCAT  
48701 TGCAGAGTTG TTCCCATGGC AACCAGATAA GGGGCTTTTT GTTTTCCTTA  
48751 GAAGATTGAA TCCTTTCAAC CAGAAGGTAA CCACTGGTTC TTCCCCACAA  
48801 TCCACACTCC AAACCCCTTA CCCTTATTTG ACTACATGAC TAGTTTTGCA  
48851 TTTATGATT TTTTATGCCC TAATTGAAAA AGGCTAAATA TACAGAAACT  
48901 GAGGCTGAAG TGGTTTAAGG AGGCAACTGG CCCAGTGGTT TCTCAGCAAC  
48951 CACATGTCAA AGCTGTGGAC GTTAGACTTG ACGAGAGCAA GACATATCAG  
49001 AATCTGTAGC AGGAGCATCT AGTCTCCCAG TTCAATAGTG TCCACAAAAG  
49051 AAATCCAGAG GTTTTTGAAG CAAGGAATTT GGGTGGCACT GCTGTGAGAA  
49101 ACAATCACCT GGCTCCTCCA TGGGGCATAG AGTGGAGATG CTTCTTCAAA  
49151 TACCCCTTCC TTTCCAAGGC CATGACTCAG AATGACTGGC GTAGGGAGCC  
49201 TGGACCTGAT CTCCTCAAGG AAGGGGAATC AGATGAGCTG TTTAATCTCT  
49251 CTTGTAAAT GAGGGTTAT GAGACCATAG GCTCATTTTG GGGGGGGTCT  
49301 AAAATGCAGT ATTTTTTGAA CTGATATGGG GAAAAAAGA CATTCTGAA  
49351 TTGTTGTGAT GTTGCAAGT CTGGGCCGTT CCAGCATAAG CACCTTTCTT  
49401 AGAGTACTTG GCTTTGTGAA GTAGTCTTAA TCCCTCTCTT CCACTATTTT  
49451 ACATCAAGTT AAAATAGAGG AAGATGCCTA GAAATGGCCG TATAGACAGA  
49501 GAAACTGCA CTAAACTCC CTCCGTCTAT CCTGACTCCT CTCTAGACTA  
49551 TGACCATCGA GGGGCCAGAA ATCATATCTT AAAGATCACT GTGCCTCCAG  
49601 TACCCAGCAC GGTGTTTAA ATATGTTTGT TGAATGAACG AACTAGTAAA  
49651 ATTTTCAAA CATTAGAGCT GAAGTATCCT TTAAGATTCT TTAGTCCCTC

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49701 ATTTTACAGA TAAGGAAGCT AAGGCTCAAG ACATTGTGTG GCTTGGCCAA  
49751 AGGCACACAG CAAGCTAAAG GCAGAGGGAG GACAGGACCC GGCTGTCTCA  
49801 ACCCCCTGGC TGCTACACTT CCTGCAGCAT TTCTAATTCT TTTACCATTTC  
49851 TTGCGAGGGA TTTTACAGGC ATGTACTGCT AGAGCCGAAA TAATTAGAAAG  
49901 CCTCTTACTA CTCATCAGAA AAGCTATGTG AGCCCCTAGG GAGGACACAG  
49951 CTAGCCTAGA CTCTGCCTCT TTGCCCTCTG CTGCTTATTA GCAGAATGTA  
50001 AGTGGTTGTG TATGATGATT AGTGTAAGTA GGATGGGCAA ATGCACACCT  
50051 TTCCACCTTT CAAACTCAGA AGTTGTAACC AAGAGTCACA CTGACTAAAC  
50101 ACTCCAATTT CCCTTCTGT TTTTCTTAAC ATATGTCCTA TTTTACCAAT  
50151 AATAGCCATG GTATATTAGT CATGGTATTT CACGCTAGCT GCAGAAATAA  
50201 CTTCCAAATC TCATTGGCTT ACTCAGTGAA AGTTTATTTT TTAATCATAT  
50251 AAAGTTGAAT GTCCTGGTCA GGCAGTTATC TAAGCCACAA CTTGGGGATG  
50301 GGGATGCGAG CAGCTTCCAT CGTATTGGCT CCACCATTCA GGGATGGCAG  
50351 AGTTGCTCTG GCATAATCCA ACCAATAGAG GGGGAGGTT TGGCACTTGT  
50401 CAGTTAACCA CCTAGCCTAG CATTGACACA CACCATTCTT ACATACACTC  
50451 CCTAGTCAT CATTAGTCA TGTGGCCCAA CCTAGATGCA AAGGCATCTG  
50501 GGAATGTAG CCCCTATCTG GTCAGCAACA ACTTTGCACT TGGAAAGGGGA  
50551 CCTGAATCG TTATTGGTCT CCAACACATG TAACAGCAA TTATACAGAA  
50601 CGTTATTTGT CAGGCAATGT GCCAAGAATT ATTTCAATTA ATCTTCACAA  
50651 CAATCCTATG AGGTTATTGT CCTCTTTAAC GTATAGATGA AAAAGTTGAT  
50701 GGTAGAGATA TAACCTAACT AATGCAAGT TGCATAAGTG GTTGGTAGCA  
50751 AATCCAAATG CAGGCTGTT CTCTCCAGAG CTCAGGCTCA TGATTGCTGC  
50801 ATTCTACTGC TTTGAGCTTC TGATCTGAGA AAATGCATCA GCCACTAAGT  
50851 AGCCTGTGTA GTCTCCAGCA ATTACTTTCC TCCCTCTGGA TCTTGGTTTC  
50901 ATTCTCTGCA AAGTGAGGAT GTTTAACTGG ATAAAACTG ATGTCACCTG  
50951 CCAGCTGGGA CATCATATGA TTCTCAGGT AAGCATATCA GGTGGGTGGG  
51001 GTCCCCAGTG ATGCTTGACC ATAGCAAAGC CCTTTCAAAG GTTTCTTAGC  
51051 ACACCACATA AATGGAAGCC TCACAGTGTC CATGTAGGAG AAAGCAGGGC  
51101 AAAGTATTTT CATTTACCCA ACAAGAAAT CAACATATAG TAAAAAGAGA  
51151 GTGTTTTCCC ACCAAGGCCT CAGATTGACT AGCGGTAGCC TTGGAATAG  
51201 GACTTTAATT TGTATAGTAC TTTTGCCACC AGGGTGGGGG GGAAGAGAGT  
51251 GCTTCTTTCG CCCAAATGCT GGTTTCATAA AACCTAAAGA TGTACATGG  
51301 AAACACACCA TCCCCCAAT CCCCCTCAA AAACCTACTG CACTTAAATG  
51351 AAAGAGTAAA GCTGTAGGAC TTTACTGAGC AGTGTCTGTG GGGTCTCTTG  
51401 CACTGCGATG CTCTGAGGG GCTCGAGGTG TATGAATTC CCAGCATTAC  
51451 TTCTCCTTAG AGGTTTCAGA TGAGCAGTAT GAGCTCCAAA CTCATGCTAG  
51501 ACCCAAGTAT TTCATGAAAG AACATCCTT GAATGACTTT ATACAGCAAA  
51551 GCTATATTTT ACTGTGTCCT AGAAAACCAA TTGTGTGTGT TTGTGTGTGT  
51601 GTGTACAAC CTGTGTGTTT TTTCTACCTA TGTCCCCCTG ATGCCCTCCAC  
51651 ACAGAACATC CCAAACCTCA TTTCAGGTTT CTCTTGAGAT TCCCAAACCT  
51701 GGAACACAGG GATGCTTCAA AGGCCTCTTG GAATGTCTTT TGAGGCTTTA  
51751 TATTGTGATA TGTGGACAG ATGGTTAAGA AACAGAGAA GAGCATCACC  
51801 AAAAGGATTT CTCATTTTAT GTGGAGATCT ATTAATATTT GCCACTAGCA  
51851 AAGGCATTCT TTCTTGGGAA TGAATTATGC CCTAGAAATC AGATTGACCC  
51901 CACAGAAACA AGGGAGAATA AATAGAGACT TGAGCTTAGA CCTTACAACA  
51951 TGGCCAGAGC TGAAGAGGCT GAGCTCTAGG CAGAGAAGAT GCAAGAGCAG  
52001 CTTCAGAAAG CTTGAGAGCT TATTTGGGTA GGTCTCTCTG GTGTAAAGGG  
52051 TTCTTGTTCG CGTTTTCTTC CAGAATAAGA AAAGAACGCA AGGTGTGAGA  
52101 GGGTGGATGG AAACAGGGTA TAAAGCAGGA GCATTTGGAA TCTGCCCTTT  
52151 GTAGCCTGGC CCAGAGAGCG TCAGGCAGCT TGTGGGTAA TAAGTAACAC  
52201 TGGCATTTTT CCATGGTTC TGTCTCTTA AAGAGCAGGA TACATAAAGG  
52251 GATTGAGATG TCTTGTGGT TTGGAGAAGC TTCTTTTTAA TACCTTGTTC  
52301 TAAATTTTAC CTGGAATTTA TTTTAAATCAG GTGTGGTAAG ATGCACAGAC  
52351 ATGGAGATGA CAGTCATGAA GGAAGAAGTA TTTATACTCA CAGATCCCTG  
52401 TAAATAGGAA GCATGGCCTC CATGCAGGCC AATGGGGAAG CACCAGGGTC  
52451 AGCCGCAAGG CAGAAGGAGC AAGAGGAAAA CATGGACAAG AGGCTCTACT  
52501 GTGGATTGAG TGGCAAAGAA TGGGAGGGGC AGAGTAAGCA GGTTTAGGAT  
52551 TATCGGGTTT GAATGACTTG ATTGAGCTGT AGGGTGTAGA GACTGCCTCT  
52601 ACTGCTGGC ACCAGGGGTA ATTAGGGCAG CTGGATAGTG GTCTGGAGTG  
52651 TGAGAGCTCC CTAAAGGAGG TGGTTGGAGG TGTAGGTTT GGATTGGTTG  
52701 ATCTGTATAT GAAAGGTGCA CGTGCAAGTT GAGTCCTCTA CTATCACTAG  
52751 AAATTGGCTG GTCCAGGAG AAGTAGTCTC TCTAGAGACA GCAATGCCCC  
52801 AGATGTCAA GCATCAGAAA ATACAGAAAA AAAATTAAAA GCATGATTAA  
52851 TTCATACTCA CAGGTCTAGT TTTTGTGTAG TTAAGAGCAA CCTAAAGAAG  
52901 TTGATACTC GTGTTGCAGG TCAGGTTTCC CAGAAATCAT ATTCTCAGAT  
52951 GAAGATTTGC ATGAAGGAGG TTTAATGCTC AAATAAGCC CTAAGGCTCC  
53001 ATACCTGTGG AGGAAGTGAA AGAAGCCCAA CTGGGCACAG AAGGTGGAAC  
53051 ACAATGCCAG TCACACAAAG ACCTCAGTGG ATCCTGGGCC ATGAGGAGCT  
53101 CTAAGCACAG ATGACCTTTC AGAAATGTCT CCAAGTGGGG AAAGGAATCA  
53151 TGCTAGTCAG TGGATGTGGG CTTCCCACTC CACCCCATGA GGGCATGACC  
53201 TTAAGTGAGA GAGCTCTTTG GACACAGGGC ATCCTAAGAG GGGCACTCAG

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53251 CAGCCACATT GGGCACCAAG ACTCTCAGCA GCTAGAAGAA GAAGGTATAG  
53301 TCCCAAAGGG GAATCTGGGC TGCACACCTT AGTATCCATT AGAACTGGAA  
53351 GTAGGCTGAA TCCCAGGCAG GGATCCCCTG GAGAACACAG GTAATTTTTT  
53401 AAAAAATCAA GCTATGTGTC TGAGGCTATG TGGTAAGACA TCTCAGTTTT  
53451 CTGCTAGGAA AAGCCACCAA ACCAGATTGG CTTATTTCATG TTGAAAAGTC  
53501 TGAGAATCAC ACTCAGATGT TGTTGATAAT TCTGCTTGA TAAAATTAT  
53551 CTATTGGTAT GCTTGTGATA TAGCAGTACC ATTGCTAAAA ATTCCATGCG  
53601 GAGAATCCAA TCTGCATCAT TTTCTTTCTC AATGATTTGT TTTAAAGGC  
53651 AGAGGTTCGG CTGTGCCCTT TTAACCTTC TGTGCAAGTG CCAGCTTCCT  
53701 TTCAAATGGA GAAGCAGCAG CCCTGTCAGA AAGGGTGGCT GGAGCTCCCC  
53751 TTTTGTGAGA GGAGGAAAAC TTACTGGGAA TTACCTGTTC GAGAGCCACA  
53801 CATGAAGGCA TACCACTGCT TCCTCTGACC TTCCAGCCGG TATATTAAATG  
53851 ACATACTGTT GTACCTGAGA ACCAATGATG AAGTGGGTGA TGTGCCTGGC  
53901 ACCTTAAAGG CTGGGCTG CTTTGACAGG GGAGATGATA CACAACATGG  
53951 CTGTTAGCCA GCTCTCACTG CATCTGGAAG CACCATGTTC CTTAGAGCCA  
54001 AAGTTCTCAA ACTGTGTTT CTGCTGGGCT CCACAGATCC TTCCCGTTCC  
54051 ACCCTGCACA CAAACGTGCA CACACATACA CACACACACA CACACACACA  
54101 CACACACAGT GTTCTCAATG CTCGCCATTT AGTTAGTATG CACCAATAT  
54151 GTGTAGTATC TGGTTCCACC CCTGGCCTCT CAGACAATTA TTAGTATTTT  
54201 TGGGAGCGGG GAGGAGAGTC AGGAAGACCC AAGCGCCATA TTTATTATTT  
54251 CCCAGCCAC CCCGGCCAG GCTACATCCA AGTTCAAAGT CTATGACCCC  
54301 CTCCTGAGC TTTCAGCACT ACCTCCCTTT TGGGGGAGG GGGGTGCCAA  
54351 TTCTCTTTCT TCTCATCATC TCCTGTGCA AAAATAAAGC CTAGGCATTC  
54401 CTTTGAGAAA CTTGGGCTG GCATTGGAAG GCGTCTGACA AAGGCTTTGT  
54451 TAAATGAGTG GAGGGAGGGA CGGTCTGGGA GATACTTTTT CAGGTGGCAT  
54501 AGGACCTCCG CTTCTCCCT TCTCACATGA GAAGGAAGAT TTTCTAGAA  
54551 ATCTACAGST GTTTAAGCTG GAATGTGCC TACAGATCAT CTGGTTGGAC  
54601 CCTTTCATTT TGCAGATCTG AGGCCTAGAA AGATTGGTA ACTTGCCCA  
54651 GGTACAGATT GACAGAATTG CTCAGTGAAA AGTCCAGCAT AAATACCCCA  
54701 GCCCATGTGG CCACTGGCTG TGTGCTCAGC TAGTGAGGCA CACTTACTTC  
54751 TTAATTTTGG CCACCCACTT TTCAGGCTCC CTTAGGACAG CCTCCACCTG  
54801 CTCCTACTGT GCTTCCCATC GTCCCTCTCC TCAGGCACAG GCTGAGGAGT  
54851 AATAGAGCA CTTGATATGT GTCAGGCCTT ACTGTGTGCT AGGAATTGTG  
54901 CTAAGTACTT CCTATGAATT TTCCATTTAT TCTTTATAAT AACTTTGTAA  
54951 AGTTAGAGCC ATTATTCCAG AAGGGAAAAC CGAGGCAATG GGAGTCAAAG  
55001 CAAAGAATTT GGGCTTTTAA CCATTACACT ATTTTGCACA AGTAGCCAGT  
55051 AATGAAAAGG CTGCTATCCG GAATCATCTT TGCAAAAGGT AATTTCTTTA  
55101 GCACTTTATC AGAAGAAGGG GGCTCCTTCC TCAAATCTG AGGGAAGAGA  
55151 AGTGGGGAAG AAAAGATGAC TGAATCCAAA GCTCGGGCAG GGAAGACACA  
55201 TCGAGTGCCA AGTGGCTGCT GCTGGGCTCT AGTCTGACT CAGCCGCCAT  
55251 CTTCCCAAGT GCTTCTGGA ATTCTCTCCT CTCGTGGGGC CTCAGCTCCT  
55301 TCATCTTAGG AAAGAAGGGT AAAGATCTAC AGACAAATTG ATCTTTAAGT  
55351 ATCCTTAGAG CACTACCATT TTCAGAATCT AGGATTCTAT ATCTTCCAA  
55401 TTATCTCTGT GTAGGGAATT ATTGGTCGTG TCTCCTGATT AGGGAGCCGG  
55451 ACACCTCGTCT GTGAGCCCA CCTGGCTCTG CAAAGTCCCT TGTGTATCTG  
55501 CCCTGCCTGG TCACGGGAGA GGAAGAGACA AGGAAACACC ACCGCTCCGA  
55551 CTCTGTGGAG CACGCGCTCT CTCCACCCA CACACCCGCT CAGGAGAGGA  
55601 GGAACCTGCA CATTTGAGTC TCCTCAGAGC CTCTGCAGAC TCCCAGCAGG  
55651 GGTCTGGCTT TCCTCTCAGG TAGCACAGTC ATGCTGTAAA CTCATTTGGG  
55701 TCTTGCTTGG TATGATAATG CGTTTAGTTG AAGGGTTATA TAATTGCAGA  
55751 GTCGATGATG ATCTCTAGGC CAATTTAAAG TCAAAGCTAT TTTTAATGGA  
55801 ATTGCCAGAG GAGGCGAGG ATGGGGGAGG GGAGGAGAGA TGGTTAGAGA  
55851 GTGCTTTTGA AACCACCTC CAACAATTC AGCCATTGCA TTTCCGAACC  
55901 TGAATTTTCA GGGCAGAAAT TGGACAATGC CAATTAATC AGAGCAGGTG  
55951 TATGTGAGAG CTGGGTTTAC CTTCTTGCAG CTACAGTTT ATTTTGAATA  
56001 CTGTTGCAGG TAGTGAAAAT ATGACTAGGC TGAATAAGAG ATCTCAGTCT  
56051 ATTCCAGCT CAGCCAAAAG CCCTTAGTGT GTCCTTGATC AAGTTACTTC  
56101 CCCTATCCAT TTCCTTACCT GCAAATGAGA AGCTTGAACC AACTATCCT  
56151 AATGTCCCTT TCAACTCTAA AATCCTAGAT GATCCTCAGA TGTCAACAGT  
56201 GCTGAAGCCC AGCACTGTAA GATGTCAGGT GGTCCGAGA GGGTGAGGCT  
56251 CTTCTGCTC AAATTATTTC TTCCACCCAA GACTCCTCAG TTACCTCTGT  
56301 ACACAACCTT GCAGGCCCAT CTAAGTATCC AATAACCTGG GGCTTTAGTT  
56351 TACAAATTTT CTGGGGGAG AAGGTAAAAG GGATCTAGT TTTCTGGGTTA  
56401 TGAATGCCAT GTAGGGAGGG CATGGTTTGA GTTAGTCTG GTGCTGGGAG  
56451 TTCATGAGAC TTATTCTCAA ATCTTCAGAG AAGAAAATTC CGTGAACACC  
56501 TGGGAACATC AGGAAAAAAA AAATGTCCCC TAGGCTACTG TCAGGTTAGG  
56551 CTGCTGGTTC TGATTTGACC TTGAACCTGC TATAATTGAA CAAGATAAGC  
56601 ATGTGACCTA ATGAAATACT TTAACCTTG TAGCTTCCTT CAGCACAGAA  
56651 GTGGCTCTCT GAACCAATTT TAAGCAATCC TGGCTCTATC TGTGCATGTT  
56701 GATTTAGCCT GTGGTTATAG TGTTAACAAT TTAGTGATTC ACCTCATTTT  
56751 TAATCTCTCT TTCCCTTTAG CAGGATCATT TTCTCTGTGT TAAGGGATCA

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56801 ACATTGAGGT AAGAATGGCT AAATAATAGC ATCTTCTGGA ATACAAATGA  
56851 CTTTATAAAT AAAAGAAGAT AAAAGGAAGA AGTAGGATGA TTTCTCAGCT  
56901 CTAATACACT TAGCAAATGC CATATGCTTT CTCTGCGTG TACTGGTCAG  
56951 GCCAGTTCTA GATACAATCA TGCGCTGCAT AATGATGTTT TGGTCAACAG  
57001 TGGATTGCAT ATGTGACGGT AGTCCTTTAA GATTATAATA CCATATTTTT  
57051 GCTGTGCCTT TTCTAGGTCT AGATATGTTT AGATACACAC ATACTTACCA  
57101 TTGTGTTCCA ATTGCCTACA GTTCCAGTA CAGTAACCTG TTGTACAGGT  
57151 TTGTAACCTA GGAGCAATAG GCTATACCAT ACAGCCTAGG TGTGTAGTAG  
57201 GCTATACCAC TTAGGTCTGG GTAAGTACAC TCTATGATGT TTTACAGTG  
57251 ATGAACTTC CTAATGACAA ATTTCTCAGA ATGTATCCCA GTTGTTAAGT  
57301 GAGGCATGAC AGTACTATAT CTCAAGACTG TCCCAAGCT GAAGTCTCCA  
57351 GTGGACACAA AGACCAATGT ATTTAGTTGA ATCGTGGACC CCAAAGTTC  
57401 AAGTCCACCC AGAACCTCAG AATACAAGTT CAAGTCCACC CAGAACCTCA  
57451 GAATACAATT TTATTTAGAA ATAGGGTCTT TGCAAATGTA GTAAGTTAAG  
57501 ATGAGGTCAT ACCAGAGTAA AGTGGGCCCT AAATCCAATA TGA CTAGCAT  
57551 CCTTGTAAGA AAAGGAAAAG GAACACAGAC AGGGGAGAAG GCCATGTGAG  
57601 AACAGAGACA AAGACTGGAG TGAGGCATCT ACAAGACAGG GAACACCAAG  
57651 GATTGCCAGG AGCCACCAGA AGCTAGGAAG AAGCAAGGAA GCATCCTCTT  
57701 CTGGGGCCTT CAGAGACAGG ATGGCCCTGC TGACACCATT GTTTCAAATG  
57751 TTTAGCCTTC AGAAGTGTGA GACAATAAAT GTATATTGTT TCAAACCATC  
57801 CAGTTGTGGG TACTTTGTTA TAGGAACTA ATACATTGAG GATGGAGAGG  
57851 TGCTGGGAA GCCCATGAGA ACAAATGGAA AGAGCCAGAA GCCCTCAACC  
57901 TTGGCTCGTC TACAGCCCAT TTTCTTCATT CCCGCATCCA GGCTTTGAGA  
57951 TGACAGGAAG CTGTGAAACC TGTGAATTGT CTCCACCGCA AATCTGCTC  
58001 CCTGGTCCCA CTTAGACTGT CAGGGTTGTG TGGCAAGGCT TTCATGCCTC  
58051 TCACTGACTG CCTAGTACGT CCCCTCAATG ACTGGTCCAC ATCTTTCTCA  
58101 CCTTTCTCAT GCATGGCCCC AGATCCACCC CAGTGCCTCG TCCTCAAGAG  
58151 GTGATTTATT CCGAGACACT GATGAGAGCA CTGTCCTTCC TGTGTCTGAG  
58201 GGAAGGCATG TAACTCTTGC TTATCTTCAC CTGTGCTCTA GATCCTGACC  
58251 TTCTCTGGCA ACCTCAGGGA CCTTGCACCA TCCATTCTTC TCGCCTAATG  
58301 GCGAGACAT GTCTCTCCCT CTCCCTTTCC ACTCTCCCTT GCCATTCTTA  
58351 GTATCTTTCT ACAAGCAGGT CTTCCAAAGT ACTGCTTGAG GTCTGAGTTG  
58401 GAGGGAACAT GCCTCTACCC TACTAAAAAG AGAAATTCCT CTGCAGAAGA  
58451 CCCAAGCTGA CTGACAAATC CCTTTACTGC AACTGCAGCT CTAGCTCCCA  
58501 CCATTTTCTT TACTTACTC TCCTGCTCAG GTTCCCTGGC ATTGCTGATG  
58551 TCTTTTCAGCC TTTGTGCCCT GGCCCTTTTC CTCCTCTCCC CTCATCTAGC  
58601 ACTACCTGTC AAAATCAGGG ACTTACTTTA AAATTTATCC CAAATATATCA  
58651 TTGCCATCAT CTCCACTGTC ACCTTATCAT ATGTTTGAAT AGCGTTTCCA  
58701 TTTCCCAAT TTCTTCGCAT GCACTTTCTC AATTGAGCCT TACGAATCCT  
58751 AGAGCTGAGA AGGGTAACAA TTTATGAGTC CTTTGACAAA TGTGGAAACT  
58801 GACATCACAG AAAGTAAGTT GCCAGCCGAT ATGTCACGT CTTCAAACTC  
58851 TTCTTTGTAT TTTTATTATC TCCCATTATA TTCTGCCTCT TGTATGATT  
58901 ATTTCTACAT TGGTCATATC TTTCTTCTG TACTGATCTT CGCTTATGAT  
58951 AACAAATAAT AATAGTTTAC CTTTGCATCA CACTTGATGG TTTACAAAAT  
59001 GCTTCAAATT CAACATGGCC CTTGATCCTG AAGATATTTA TCACTTAAGA  
59051 ATCATTTATCG CCATTTTAAA ATACAAATTT ATTACTTGGG CTAAATTTTC  
59101 TTATTATAGT TGGGATAGGC CTTTATCCAT AGGGTGAGTG CAGTATTGT  
59151 GGA CTGT CAT GGCAGCTTAA ACATTTAGTA CTTGAAAATC TGATGCATTG  
59201 ATCATCAGAG AAATGCAAT CAAAAC TACA ATGAGATATT ATTTCACCCC  
59251 AGTTAAAATG GCTTTTAGCC AAAAGACAGG CAATAATGAA TGCTGACGAG  
59301 GGTGTGAAGA AAACGGAGCT TTCATACACT GTTGGTGAGG ATGTAAATTA  
59351 GTACAACCAC CAGGGAAAAC AGTTTGGAGG TTCCTCAAAA AACTAAAAAT  
59401 TGAGCTACCG TGTGATCCAC CAATCCCACT GCTGGGTATG TACCCAAAAG  
59451 AGAGGAAATC AGTATATGAA AGAGGTATCT GCAGCCGGGC GCGGTGGCTC  
59501 ACGCCTGTAA TCCAGCACT TTGGGAGGCC GAGGCAGGCA GATCATGAGG  
59551 TCAGGAGATC GAGACCATCT TGGCTAACAC GGTAAAACCC CGTCTCTACT  
59601 AAAAATACAA AAAATTAGCC AGGCGCGGTG GCGGGCACCT GTATTTCCAG  
59651 CTACTCGGAA GGCTGAGGCA GGAGAATGGC ATGAACCTGG GAGGCGTAAC  
59701 TTTTCATGAG CCGAGATAGC ACCACTGCAG TCTGGCCTGG GCGAAAAGAGC  
59751 GAGACTCTGT CTCAAAAAAA AAAAAAAAAA AAAGAAAGAG GTATCTGCAC  
59801 TCTCATGTTT GCAGCAGCAC TGTTTCAAT AGCTAAGATT TGAAGCAAC  
59851 CTAAGTGCCC ATCAACAGAT GAATGGATAA AGAAAATGTG GTACATATAT  
59901 ACAAATGGAGT ACTATTCAAT AAAAAAAAAA AATGAGATCC AGCTATTAGC  
59951 AACAACTATG ATGGAATGG AGATCATTGT GTTAAGTGAA ATAAGCCAGG  
60001 CACAGAAAGA AAAACATCTT ATGTTCTTAC TTATTTGTGG GATCTAAAAA  
60051 GCAAAACAGT TGAACCTATG GACATAGAGA GTAGAAGGAT GGTACCAGA  
60101 GGCTGGGAAG GGTGGTGGGG GGCTTAGGGG GAGGGTGGGA TGGTTAACTG  
60151 GTACAAAAAC AGAAGAATG AATAAGGCCT ACTATTTGAT AGCACATCAG  
60201 GGTGACTATA GTAAATAATA ACGTAGCTGT ACATTTTAA AAAACTTGAG  
60251 TATAACTAAA TTGTTTGCAA CTCAATGGAC AAATGCTTGA GGGGATGAAT  
60301 ATGCCATTAT TCATGATGTG CTTATTTTAC ATTGCATGCC TCTGTCAAAA

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60351 CATCATATGT ACCCAATAAA TATATACAAC TACTACATAC CCACAAAAAT  
60401 TAAAAGTAAA AAAAAAATT AAGAAAATAA AAGAACAAAA GTAGATGTAT  
60451 TCTACATGTC TCCATATTGT AAAACTAGAA CCAGTCAGTT AACTTTAGAG  
60501 GAAGGGGATT GTGGACTTGA TATAAAGACA ACTTTATAAT ATGCAGAGCA  
60551 GCCTAATCCT ACAATTGTCA AAAAGTATAG TGGATTCTTT ATTTATTTGT  
60601 CCATGATATT ATAGAGGTCA TTTCTGCTTT AACAAAGTAGG TGGGAGATAG  
60651 CTAGGTAGGA TATATTTTGT TCTTATTTTT TATTTTAAAA TATTGGGCTG  
60701 TGGCTGGACA TGGTGGCTGA AACCTGTAAT CTCAGCACTT TGGGAGGCTG  
60751 AGGCAGGCAG ATCACCTCAG GTTAGGACTT TTCGAGACCA GCTTGGCCAA  
60801 TATGGTGAAG CCCCATCCCT ACCAAAAATA CAAAAATTAG CCAGTTGTGG  
60851 TGGCATGCAC TGTAAGTCTCA GCTCCTTGGG AGGCTGAGGC AGGAGAATTG  
60901 CTTGAACATA GGAGGTGGAG GTTGCACTGA ACTGAGATTA CGCCACTGCA  
60951 CTCAGACTG GGAACAGAG TGAGACTCTG TTTTATATAT ATATATATAT  
61001 ACACACACGT ACATATACAT GTATATATAT ACACATTATT ATTGAAAGCA  
61051 GCCAAAGAAA AATAACACAT TATATATAGA GAAAGAGCAA ATGATGAGTG  
61101 ACTTTATATG TATATATATG TGTGTGTGTA TATATATAAT GTGTATATAT  
61151 ATACATATAT ATATATAGGT TAAGAACCTT CAGCACATGT ATACCTATGT  
61201 AACAAACCTG CATGTTCCAGC ACATGTATCC CAGAACTTAA AGTGAAGAAA  
61251 AAAAAAAGA ACCTTCTGCA TGCCAGTAAC TGTGCTAAGT GATTAGGATG  
61301 CAATGGTAAT AAAAACAAAG TCCCTCTCCT TAAAGAATTT TCTATTTAGA  
61351 AGGGAAACCT GGTAAATAAA AAATAAATAT ATAAATTACA ATTTGTGAAA  
61401 AGTGCTACAC ATGAAAGAGT GCTGAGACAG ACATCAATGG ATAACTTTA  
61451 GATTGAGAAG GGCCTCTGCA AAGCAACATT TAAGGTGCAA CCTGAGAGAA  
61501 TAGAAGTTAA ACAGGCAGAT ATTGGTGAAG GAGCAGTCTA GGCAGAGGGA  
61551 ACATCATTTG CAAAGGCCCA GGGTAAAGAA GATCCTGGTA AGGAAATGAC  
61601 AGTGAAGAAA GGTAGTGTGA GCAGGACTGT GGCTAGGGCG GAGAGGCAGG  
61651 GAAGTAGTTT AGAATTTCAA TGCAATAGGA AATATGGAAG ATTGAAGGCA  
61701 GTTTTGCATT ATAAATAAAT ATGATTGCTA TTTTAAAGCT ACTTTATCTA  
61751 AGGATGGAAG ATTCTTAAAT AAACCTGTGT ATACTTGGAC CACACCACCA  
61801 TGAGCAGCAG CTGCTCTAAT TCAGAGCAGT CCTCCTGCCA AACGCTGTGT  
61851 GAGACAAAGC TCTGATTAT AAAGGGGCAT TTTTCTCTGG GAGAAAACCA  
61901 GTGATCCATC TGTAGAAGTA CCTGAGTCTA AGGGGAGACG AAGCAGCAAA  
61951 AGAAATTGGC TTGTGAGGAC AGGGACATTG TAAGAATGAA AAGAGGAAGG  
62001 GAGGTGCTGA GCCCTTTTTC TTTTCTCTTT TTCATTTTTC TTTTCTTTT  
62051 TTTTGTGAGC GGAGTCTTGC TTTGTGCCCC AGGCTGGAGT GCGATGGCGT  
62101 AATCTCAGCT CAGTGCACC TCCGGCTCCC GGGTTAAAGC GATTCTCCTG  
62151 CCTCAGCCTC CCAAGTAGCT GGGACTACAG GCCCTTTTTC TTAATCCACA  
62201 ACCTTCAGTT GGATTTTGCA AATGAGTCTG TCTTCACTGT TTCCATTGAG  
62251 TGGCTGGAGA CAACTTGGAA GAGAATCTCA GAAATAAATC TGGCTGCTCA  
62301 CCCAGTTGTT TGTAATTTT TATTGAGACT CTACTGTGTG CCAGGCTGTA  
62351 CCAGGCACCT AGATATGACA GTGAATGAGA TAGGCAACAT CTTTGCCATT  
62401 GGAGAGCCTA CACTGAAGTG GACATGAGGG AGTTGAAAGC AACTCTTATA  
62451 GGAAATGATG GTGAAGACGT CCAAGAGAAG AAAGATGAAG GGCACACACA  
62501 TGCACGGATG CCAACATCT ATCAGAGAGA AAGGAATTTT CAGACCTGAC  
62551 CTGAATGATG AAAGGAGGTT TTTGGAAAGG AAAATAGAAG GGAAGGACAA  
62601 GGGAAATTAT CTGGGCAGCA ATATTTATCT GCTGTGGTGC TTCCTCTCT  
62651 CTCTAATCCT TTTCCACCCC AGCCCCAAAT TTGAAAGGAT TGCAGGGAGC  
62701 TCCTGCTGGA GTCATTTCTG GTATTAAGAA TGTACAGAAA GGAAAGCTTT  
62751 GGTTCGTGAG TTGCAAGGCT CCCTGTCTTT CATTCCTATT GTAGAAAGCA  
62801 GCTTATATAA AAAGATGTGC TGTGTGGCCC TTTGAGCTGC TGTGATTGTG  
62851 TTAGGCCACC CTGGATGGT ATTGCGATGA ATTAATCTAC GTGAGCATCT  
62901 CTACAAATCA AGAGGCTGGC TTCTGTTTGA AATGTCCCAA GGCTTTGTGC  
62951 ACAGGGCAAG CTAAATGTCT CCCTACAGTG AGACTGAAAA TGCTTGGGT  
63001 GCCCTTGTG ATAGGATCTG ATATATAGAT GCATGTCTAC AATTGCACAG  
63051 TGGCTGCTGG CAACATTTAT TACAATCTGA ATGTGAAATG GCTATTCTGT  
63101 TCAAGGATTC TGATAAAAAG TATCAGCCAC AGTAGATGTA TAAGGAGCCT  
63151 GGTTCCTACT GCACTGACTA CAGTTATCTG ATTTTCTTTT TCTAGTTTCT  
63201 TTTTAGTCTG TGGAGCAAAC AGAGATTTCC TCCCCAATG ATGTCCTTTT  
63251 TCAGTCACCA GGGTGTGGTT ATTTGGTTTT ATGTAGAGGA GATAGAAACC  
63301 AATCAGTCTA AATCATATTC TGTGAAATC AGAACCAAGG GATCCACAAT  
63351 CTGGCTCCAA TCTAACTTTC CAGCCTCAAC TCCTACCTGT TCTTGTGTAC  
63401 TCTTACCCCT CTAACCACCT TGTGGGATCC TGAACCTGTA ACCTGTGCTC  
63451 AGACTGTGTC TTTTGCACTT CTCTGATGGG AAAGATTCTC CTCATCTTTT  
63501 ATGATTGAGC TGAAGTTTCA ATGCTTCTGA AATTTTCTTC TGCTCCTGCT  
63551 GGAGAGCTTG TTTCTTCTGG ATTCCCATAG GTCAGGTCCT GTGTTGGCA  
63601 TTGGGATACA AAGCCAAGTA ACATAGCATC CATATTCTCA AATCCTCACA  
63651 ATTTGGTAGG AATATAGACA AGTAAATACA CCTGTGCAA CCTTTGTAA  
63701 CAGAGGTATA AAAGGGTATG AAATAAAGAA TTTAATCAAA TCAAAATGAA  
63751 TATGGGCTTC AACTCTGAGA TCTTCTTCCA TGATAGGGTT CCCAGTTTCT  
63801 TCTAGTGAGG TCAATGATTCC ATACTGGCAC TCTTCTAGGC ACATAAGGCT  
63851 CTATCCTATT ATTAATAAAA GATTATTACC ATTCTCACTG CAAGCAGCAG

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63901 CAACCTGACA CCATCATCAT CATAAAATAA GTAAAACNAG AGTTAATTAA  
63951 GTGTGAACCT TCTAAACCAA CATTGTATGA GATAATTACT CATAAAAATG  
64001 ATTCTTCACT TTCCAAAGGT GCCTCTAAAT ACTAAGATTT CAGTTACAAT  
64051 AAAACTTAGA TCCAATTAC AGATATTAAT TTTGGTCCAT TTTCCAAGAA  
64101 TATTTTCTTT TCTCATAAAA TAAAAAAGT ATGTGAGAAT ATTAGCACAA  
64151 AGGGGTGGA AAATAAATTT TATTTATCCA GATGTGAGAT AAGAGGCACA  
64201 TGGGTCTTTT TTCTTGTGTT ACTGCACTGG TTAGGACCTC TAGTATGTTG  
64251 AATAAAAGTG GTAAGAATGG ACATTCTTGC TTTGTTTCCA GTTTGCTTTA  
64301 ATATGTTTTT TGTCAGTTTT TCATAGATGC CTTTTATCAG ACTGATTAAT  
64351 TCAGTCTATT ATTATTTTCAG TATGTTATTC AGTTTATTAT TTCATAATAA  
64401 TTTTTTAAAC CATGAATGAG TTTGAATTTT GTCATTCCCT TATGTATCTG  
64451 TTGAAATGAT CATATCGTTT TGCTTCTTAA AGCTTCTAAT ATGGTTTAAT  
64501 CACATTTTAT GATTTTTTCAA ATGTGAAGCA AATTTAAAT CATGGCATAA  
64551 ATCCTACTTG GTCATCGATG TGTTATCCTT TTTGTATGCT TCTGGGTCA  
64601 ATCTGATACT ATTTTGTAA GTATTGTGG TGTCTTTTCA TGAGAGATGT  
64651 TGGTCTGCAA TTTTTTTTTT TTGTAAGGTT TTTGTAAGGG TTTAAGAAAG  
64701 CAAGGTCAAG TAAGCTTCAC AAAGTAAGTC AAGAAGTATT TTCACCTTTA  
64751 TCTTCTGAAA GAATTTATGC AACGTTGAAA TTATTTGTTT CAGAGATGGT  
64801 CAACAGAAATA TACCAGAGAA ACTATTTGGA CTTAGAGCTT CCTTGGGGGA  
64851 AGGTTTTTGA TAAATAATGC AATTTCTTTA ATACATAGTA CTTATATTTT  
64901 CTATCTTACC TTGTGACAA TCTGATGAAT TGTGTTTTTC AAGAAGTTTG  
64951 CCCATGTCAT CTGAGTTGTT AAACCTACTA CAACAAAGTC TTTGATAATA  
65001 TTCTTATATT AGCCTTTGAA TGCTATAAG ATCTGCTCCT ATGTTCCCTC  
65051 TCTCACTTTT TTAAAGAAGT CTGCTAGAG GTTTACCAAT TTTATTTTGT  
65101 TTTATTTTAT TTTATTTTTT CTTATTTGAG ACAGAGTCTC GCTTGTGCGC  
65151 CCAGGTTGGA GTGCACTGGC TCGATCTCGG CTCACTGCAA GCTCTGCCTC  
65201 CCAGGTTGGA GTGCACTGGC TCGATCTCGG CTCACTGCAA GCTCTGCCTC  
65251 AGGCACCAGC CACCATGCCC GGCTAATTTT TTGTATTTT AGTAGAGAGC  
65301 GGGTTTCACC ACGTAGCCA GGATGGTCTC GATCTCCTGA CCTGTGATC  
65351 CACCTGCCTC GGCTCCCAA AGTGCTGGGA TTACAGGCGT GAGCCACGCG  
65401 GCCTGGCCGA GGTATTACCA GTTATTAAT CTTTCAAAG GACTACATT  
65451 TGGCTTGAT AATTTTCTCT ATTTTATATC TACATTATAC TGATCCCAAT  
65501 TCTTATCTTT ATTCTTTTCT TCCTTCTCTT CACTTTGGGT TTAATTTGTT  
65551 CATTTTTTTT TCTGGCTTCT TGAGATAGAA GCTGAGATCA TTGATTTTGA  
65601 ACCTTTCTCT TTTTCTAAAT AAGTGCATTT AAACCTACAC ATTTCCCTTT  
65651 AAGCACTGCC TTAGCTGTAT CTCACAAATT TTGATATTGT CTTTTCATTG  
65701 TCTTTTATTC AATATATTCT AATTTTCTCT GTGATTCTCT CTTTGGCCCA  
65751 TAGGCTGTTT AGAAATATGT AGTTAGTTTC CAAATATTCT AAGACTTTCA  
65801 CAGATACCTT ACTATTATTG ATTTCTAATT TAATTCTGCT ACAATCCAAG  
65851 TATATACATT ATAAAGTTTC AGCCTTTTGA AATGTATTAA GAATATTACC  
65901 AGAGATAAGA AGATAAGAAT ATTACCAGCG ATAAGTAGGG ATATTTCATA  
65951 AATAATAGAC GAATTGATTC ATCAAGAATA TACAACAATC ATAAATGTGT  
66001 ATGTGTCCTA TAACAGAGTC TCAAATTATA TGAAACAAAA CTGACAGAAC  
66051 TAAAGAGAGA AATGGCCAAT CCCACAATCT TTATCTTTAT CAGGTGATTT  
66101 ATCTTGGTGA ACATTCCTTG TGCTCTTGAA AAGAAAGTGT ATTCTGTAGT  
66151 CATTGGGTAT AAAATCTAT ATATGACAAT GAGGTGATTG ATAAATTTAT  
66201 TTAGATTGTC TATATCTTAA GTTTGTAGA ATTATTTCAT GAATTACTAT  
66251 GACAAGGATG TTAACAACCT ACAGCTATGA TTGTGGAATT GGCTATTTCT  
66301 CTCTTTAGTT CTGTCACTTT TGTTCCATGT AATTTGAAAC TCTGTTATTA  
66351 AACACATACA TTCATGATTG TTGTATCTTC CTGATGAATT GGTTCGGTTA  
66401 TTATTTATGC AATGTCCCTA TTTATCTCTG GTCATATTCT TTATCTTGAA  
66451 GTCTTTTAA CTGATATGAA TGTAGCCACT TCATCCTTTT TATGCTTACC  
66501 ATTTGCATAG TTTATATTTT TCCATTATCT TATATTACA CTATTATCC  
66551 CTTTATACTT AAGTCCATGT CTTGTAGACA GTATGCAGTT AATTGTGCTC  
66601 TGATTATTTT TACTCCTTTC TGACAATTTG TGCCTTTCCA TATAATATGC  
66651 TTATCAATAC AGTTGGAGTT AAATCTACCG TCTTGTATT TGTACATCT  
66701 CCCATCTTTT GTTGTGTTT CTCATTTTCT TGTATTATAC CTTCTTTTCA  
66751 GTTATTTTTT TTTTGTATTC CATTTTAATT CCTCAATTGG CTTTATAGCT  
66801 ATATATCTTT GTATTATTTT TTATGTTTGT CTCTAGGAT AGCAATATGT  
66851 ATACTTACCA CAGACAATTT AGAAATCATA TTGTACCACT TCACATAAAA  
66901 TAGAAGAAGC TTGCAGCAGT CTATGTCCCT TTACACTCCC ATTTCTTGTG  
66951 CTATTGTTTC CGTATGTATT ACATCACGTA CATTGTAAAA TCCACAATAG  
67001 AGTGTATATA TCTTTTCCA AATCCTTGTG TGAATTAAAA ATTTTATGAG  
67051 TAGAAAAATA CATATAACAT TTTATCTTAA CCTACATACT TACCAGTTCT  
67101 GCTTCTTTT CATTTCTACC TGTTTCAGTC TTATCTGTAA ACCCGTTTTT  
67151 ATTTGGTGTG ATTTCCATTA GCATTTCACT GCAGAACTTC TAGCAACATA  
67201 TTCTCTATT CCATGTATCT TAAATATCT TTATTTTGCC TCTGTTTTG  
67251 AAATATATTT TAATTGGACA TAGAAATCTA GGTGGCAGT TTTCTCTTAT  
67301 ACTCTGGGT TTCAATTGCT TCTGATTTCT GTTGTATTAT AGGAAAAGTC  
67351 ATTGATTATT TGCTCTTTCT CTATACACAA TGTATTATTT TTCTTTGGCT  
67401 GTTCAAGAT ATTTTCTCT TTATCTGTGG TTATCAACAC TTTGATTATG

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67451 ATGGCCTAAG TGGTATTATT GTTGTTTGTA TTTATTCCAC TTGGTGTTC

67501 TTGAGCTTCT AACTTCTGTG AGCTTTTTTT TTCTCAGCGA ATTTGGAAAA

67551 ATTTAAGCCA ATTATTATAT AATTTTCTT CTCCATTCTT TCTACTCTCT

67601 TTGGAACCTC AGTTGTACAT AGGTTAGACT GCATGACGTT GTCCCATAGA

67651 TCACTAAGAC TCTGTTCAAT TTTCAATTTT TTTCTCTATG TTCTTCAGAT

67701 TGGACAATTT ATCTTGATCT CTATTAATGT TCACCTATCC TTTATTATGC

67751 CACCTTCAAT CTGATATTAA GGCCATTGAG ATCTAGAATT TCTATTAGGT

67801 TATTATTATAT AGTATTAAAT TCTCTGCTAA GATTTTTTGT CTGTTTCATTC

67851 ATTATGACCA CAATATTAGG TTCTTAAACA TATTTTAATA GCTGCTTTCA

67901 AGTCCTTGTC AGTTAATTCC ATCTGAGTCA TCTTGGGGTT ATTTTCTATT

67951 GAGTGATCTT TACCTTATCT GTCGGTCACA TTTTCTCTG TTTCTTCACA

68001 TGTCTAGTAA TTATTTATTG TTTGCTGTAT ATTGAAATGA AATATTATAA

68051 ACAGTATCAA TTACATTATC TTCTTTTAA GGGTATTGAG TTTTGTCTG

68101 GAAGTAGTTA AATTACTAGT AGAACTTTTT GTTCTGTGCA AACTTGATCT

68151 TATTCTTTGT TACAGTGAGC CTATTTTAGT TTTAAAGTTA GTCCTAGGGT

68201 ACAACTCTTG CTCTATTGTA TGCTCCTTAC TTCTATCACA TTTATTCTTA

68251 TTGCCTGAGA TAGTCAATGA GTTCTCACCT GAGCAGGAAC TGCAACATTT

68301 CTTGACATGG TCTTACCTAT GTATTCAATC TTCATCTCTC AGGCCTGTAA

68351 GAAGAGATCT CTGTTGGGTC CTGTGGAATC TTGCTTGCAC TTGGACAGCT

68401 CAGCCTTCAG CCAAAGACTT GCAGGAAAAC CCCATAGAAA CATCTGGGCC

68451 CTCTCAATAT TTGATGTTTA GGAAGCTAAA CGTCAAGTAT AGCCTCCTTT

68501 TCTAGGGACC CTATCTTGTG AATTTCACTC ACCTTAACAA CTCAGAACTC

68551 TTATCTTCTG CTTCTCAGG GGAGCTAAAC TGTCACTTTC TGTGGGCTCC

68601 ATCTTCTCTG TCCACAATAG GAAAGTATCT GCAGAGAAAA GGCTGGACAA

68651 TTGTGTAGTA ATTGCTTCAC GCATTTCCCT TCTCTCAAAG ATTGTAAGTT

68701 TGCACTGTTT GCTGTTCAAT ACCTGAAAAT GATTTCTACA AATGTTTTT

68751 CCAGTTTTAT GATTGTTTTC AATGGGAGAT CATTCTAGT ACCAGTTCCCT

68801 CCATCATGGC CAGAGGTACA AGTTCAACTT GGATCATTTT AAAAATACAA

68851 ACTGGGGCAT GTCACTTCTT GCGCCAAACC CCTTGGTAGC TTTCCATTGC

68901 TCTTAGAATA ACTTTGTGAT CTACAACATC TTCTTCAAG CCCCGCATGA

68951 TACAAATTCT GCCTATTCTT CTAGTTTCTT ATTGCACCAC CTTGTCCCTC

69001 ATCCACCTTT TTTTATGCT TCTCTCTTTC TTTGAACTTC TACCACCAGG

69051 TTTTTTCACA CGTCTTCTT TCCCCATTAA CAATGATCCA CCATTCTCTT

69101 TCTTTATCCA CTGTTACTCA TCCTCATAAC TGAACATCA TTTCTAAGG

69151 ATGGCCATTG CTGGTTCAGT CAGTCTATAT TTCATCCCCC ATCACATACT

69201 CTTGTTTTAC CCTATATTTT TCCTTCAAAG CACTTATTTA AGTTGTAATT

69251 ATGTGTTGTT TATTTTATGT CTGTCTGCCC TCACAGAATC CACAGTCCAG

69301 GAGAACAGAA ATCCTGCCTC TTTTATTTAT ACCACATCCA CAGTATTATT

69351 AGTGCTGTG ACCTAGTAGG TATGCAGTAT GTACCTATTG AATAAATGAA

69401 TTGACTTCTG TCTTTTAGAT CGTCTACTCA TTTTATCATT GATGACAAAC

69451 ATAATACCTT ACATTTCGTG AGTCTTTTTC ACTCCTCAAA GAGGATTTTC

69501 TTGCATAGCT CTCTGAGCCT CACAAAACCC TTTAAGGAAG ATTGTGAATA

69551 TTATCAGATA AAGATTGTGA GACACAGAAA AGCCAGATGA TTTGGCAATG

69601 CTCATAGTAC CAGAGGCAGA AATACAGCTA GAACAGTCTC CTGGCCTCTA

69651 ATCAGAGATT CTTTCCAGAA CACTGCTTCA TCTTCCATTG TCTTGGGTTT

69701 TTTCTATCCT TACTTTATAG GGCAAAATGT GTGCAAGTA TAATCCCCTC

69751 TTTGCAATGT GTTTTATAGT TTTTCAATTG GAATCATGTA GGCTTTTTAT

69801 GCCCTTAATA AATATCAGTG AGCACAAAGG AAGTCTGTG AGGGCTTATA

69851 ATCATTTTGC TCCCATTAAT TCCAACACTG AGCAGTTTCC CCATTTCCAT

69901 TCTTGGCCTT GTGAAGCTCT TTGCTATCCC TGTAAAATC TAAAGTTGCT

69951 TGAACCTTCT TATTGCAAAA ATGCATCTTA AACATTCTAA TACCTCTTTT

70001 TTAaaaaaac AATAAAGACT ACGTCAAAAA TCAGCCATCA ATCGAGAAGC

70051 CCTGCAGTCA TTTGTGTGCT GTTGTCCCTA AGTAGAAGTG AATGTGCTGA

70101 GCTCTGCATT CCCCACCTAG CTCTCTGTG ATCAGGGTGG ACATTCCCAG

70151 GACAACCTGG CCGAGGCTGG AAACACCATC TGAATGTCTG ACCACACAAA

70201 GTTGAGTGGC TGATCCAGGT TTAACCTTGA CCTCATCAGC ACCACCTTCT

70251 AAGCAACACT TTGGCTCAGA AGCCAGTTA TTTATTCCAA GGGATGATTG

70301 AATGCAGTGC TAGTGTTTCT TCAGGGCTTT TGAACCTATT TATTTATCCA

70351 GTCATTTATA AAAGATGAAG AGGAGAACAA GGTAGGCCAA AGTGGCTTTG

70401 TACTATTAAA GGCTGCTTGA TTTCTAAGTA CATGTTCTTT GCCACCTTTC

70451 TGCCATTCCA CATTCTAGAA GCCATGGGTA AGTCAGCACA GGGATCTTAA

70501 CATGATAACA TTGGTTTTAG GAGGTCTCGT GCATAATGGA CCAGACTTAG

70551 AGCACAAATG TGTAAAGGTAG TGATTTAGGT GAGCAGCAGA TTTCTGGCTT

70601 AGGAGTTTAT TATCAGATGC TTTTAAACG ACTTGTGGCC CAGGATCCCT

70651 GCACCCATGG GAAGCATTGT AGCCTTAGAA CTCTGGGAAT TCTGAATATA

70701 ATTCTGGAAT CAATCGTAAG GATGCATATC TGATGCTTAG TGCAAAACCA

70751 GAGGCAGAAT ATTTGCAGGC AGTGTATCCT TGAaaaaaCA ATCTAGGTCA

70801 TTTTCTGACC ATGCTTCAAG CTTACTTTTC CATCCTTCTT GATGGTAGTA

70851 CTAACATCAT TTGTAGACCA TTTACGTGGT CAACACTGTG CTAAGCTGTT

70901 AGCTTCATTC TCTATGAGAC AGGCACCTCT AGCCCAACTT TACAATTGGG

70951 AAAACTGAGA CTCAATGAGA TAAAGTAAAT TCTTTACAGT CATTATGCTA

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71001 GTCCATGAAG GAGCTGCGAT TTGCAACTAA ATCTATCTGA TTCCACAGTC  
71051 TTTGCTTTTA ACCAGAGGTT AGCAAACTAC TTCTGTAAAG GGAAGACAGT  
71101 AGTTATCTTA ATCTTTGTGG GCAACATAGG GTCTCTGTAA CGTATTCTTC  
71151 TTTCTGTCAC AATCTTCTGG AATGTAAAAA ACATTTAAAA TTACAAACC  
71201 TTACAAGAAC AGCTCATGGG CTAAATCGGA CCTGGATTTA GTCTGTGAAT  
71251 CATAGTTTGG TGACCCCGCT TTTTAACCCAG TATGTACCCT CCTTCTCGGG  
71301 ATGTGAAAAA TTAGTGCAAT TGCAATGGAA AATAGCAAGA AAATGGTAAG  
71351 GGCCTGGAAG AGGCAGCAGG ATTACATCAG GTGCTATCCC TGCTCTGGTG  
71401 AGATGAAACT GGGGATCATT GAACCACTTG GCATTTGTTA AAGAGTTCTG  
71451 CTTTCCCTCT GAGATTCTTT CAGGAACCTC ACACCTCTAG CAGCCCGGAG  
71501 AACCGTGGGC TGCAAGGAAA TGCCTCCTCA AAGGAGTAGA AAACCTGCAG  
71551 GATAGAAATC ATCACATCTG TCTGGCTTTT CTCACCTTTT CTCTTCTGCA  
71601 CTTTCTTGGA TATAATCAA GCACCTACCAG GAACCTCCAGA GTCGGCACCT  
71651 TTTTCAATTT GTGTTTTCAT TTAATTATTT CTCAGCTGCT AAGTGTTTGA  
71701 CTGTTTAAAG GACTCTAGTG GTAAATATTT GTCTTTAGCC TGGCAGAAGC  
71751 TGTGGTTTCC TTTGATGAGC TCACACGGTG TGGCTTTTAA GATGCTGCTG  
71801 ACCAGGACAG CTGACTGTCC CCAGTGGGTG CAGTCCCCAG CAGTGGGCTG  
71851 GACCCCTTCC AGAAAGCGCT GCTGGGCCAA GAGGCTTCCT CCAACTTCCC  
71901 GCTGCCCCCA TCTAACCAAC ACCTCAGTCT CTTCTCCACC TGCTTCCCTG  
71951 CCCTCTTCC TTTCCCTCGCA GACACTTTCT TCTGCCTGGC AAAAGGAATC  
72001 TTGTTTCCAT GGAAGCCTCA TTAATCTGCT ATCTTGCTCA GTTTGGGTTT  
72051 GATCACGGCT GCCAGAAGTA TTTTTAGCCC ATGCAGTTGC GTAATGAGAT  
72101 AGAGATTGGG GAAAGGGGGA GGTGACTGTA TAGGCAGAGG GTTTTTTTAA  
72151 AAAAAAGTGA GAAAGAGAAG GAAAACCTCT AAAGAAAAGA GTTTTATGGA  
72201 ATTGGAAGAA GGATGGAGCA CCTCTTTTGG GAGCATGAGG CTGGTGTCT  
72251 CTGGTTAGCT CTTCCCACTG GAAGCCCATG GACACTTGCC ATAATACCTG  
72301 TCCTGGTCAC ATGTACAGGG AACCTCTGAT CTCCCTTTCC ATGAGCTTAG  
72351 TTGGCCAGC CAGGGTGACA CTTATGCTAG GGAGTGTGAT TGATGTTGCT  
72401 GCTTACAGAT TTCCCTCCC ACAGACCTGA TGGGGCAGCC AGGATAGTGG  
72451 CAGAGAAGAA GACAGAGCAA TAGCAGGAAA GAGAGGACAA CACTAACACA  
72501 TTGGAGGTTT ATGTTCAAAG ACGGGATCTA GGGGGTCAGA GAAAGCACAC  
72551 CTACCATGTA ATTGGTGCTG GAATCTGATG CCAAGTGCAC CCTTGGCTTC  
72601 TGAGGTTCTG AGAACTCTTG CTTGTGCTTT TCAGCCAGAC TATGCCCTCA  
72651 CCTGCCCTG TACTTTAAAG AGCTCTTTAG GCTGGAGTGG TTGTTTGCAT  
72701 TGGATTGTTG GAGTGTGTGT GCATGTTGTT GTGTTCTTGT ATTACAAGAC  
72751 AAAGAGATTA AAAAAAACC ACATGCAGCT GTCACAGCTA ATGTTTATTG  
72801 AACTTTTACT ATGCCACATG GTGTTTAAAG CATTTATAT GTGTTAACTC  
72851 ATTTTCCCTA ATTCTATGGA CTAGACACTT AAACAGTCTC CATTGTACAA  
72901 ACAAGGAAAC TTGAGGCACAG AGAGGTTGGG AAACCTCATT GAGGTCCCTC  
72951 AGCTAATTA TAGTGGAGCC AGGTTTGTGA CCCAGACAAC CTGATTTGAG  
73001 AATCTGCAGT CCTAGATTAG TAACGTGTTG TTGGCCTGTC ACACATTTTA  
73051 AATGACATTC TGTACACAGA ACCATTTATA GTAACTTTGT ATTGTTGAGC  
73101 TGAAAGGAACT GTGCAGATGT GCTGCTGGGA TTTTCATTCAT CTTCAAAGAG  
73151 GTGTTTTTTT TTTTTTTTAA AGGAAAATGC TTTTCTGAGG GTGGTATCTA  
73201 AATTCATAAA AATCTTTACG ATCAAGATTT TCACAAATTT CATTTCTGACT  
73251 CTGTTGCATT GCCCTTCTTC CCATATTCCC AGTTAGTTTG TATTGATTGC  
73301 TGCATCTCCC TTTAGCCCAT GGTCCCCCAC AACATTCTT GCAGAACTGT  
73351 GTCCTGCCTT CACACTGTCA GGCAGCAGGA GCCTCTCTAG CGGCCAGCCC  
73401 ACAGTCTGTC AGCTCCTTCC TCAGGACGTT TAATTCCCCA CATTTCTATG  
73451 CAGTTACCTC ACAGAAGGAT GGTACGAGG GCCTCACTTG GCTTGGCAAG  
73501 TTGGTCCCTT TTTTACTCAC AAGACTCTGT TTATCTCTTT GTTTATCTTT  
73551 GTTTATCTCT TTGTTGACCT GCCCTCTTTC AAGGCCTCAG TTTTCTCTGA  
73601 AGTTTACAGC TTCCCTCCTC ATCCCGCAA AGACCAAAGT GGAAGAGATG  
73651 AAACCAGAAT CCAGTGCAAG CCCCACTGTC CACAGCTCTT CCTCTAAATG  
73701 CATTTCTCTG TTGTTTTAGG ACTTGAGAAT GAAGAGGGAC ATGAATTGAG  
73751 GATTTGTTTA TTATTCTTTA CAATATCCCT GTGAGCTGAG TACTGTAAT  
73801 ACCCCCATTT GATACATGAG TAAACTGAGG TGTGGAGTGA TAGAGGAATT  
73851 TGCTCAAGGT CACATAACTA GTAAGTGGGT GGAGCTGTGA TGTGAACTG  
73901 GGCAGTCTGA TTCTGGGACC TGTGCTCTTA ATCACCATC TATATTGCCT  
73951 CCTACTTGAA AACATCCAGG GAAAATGTTG AGATAGATCA GCTGAAATCT  
74001 TCTTGACAG TAAAGCAGGG GCCACCTGTC CTGGAGTTAC ATTCATCTTG  
74051 TTCATTGTCA ACGATTGTG TTCAGTGACA CCTCTTCTAG CCCAAGAACT  
74101 TACCTGGGTG TGTGACAAT TGGACATGAC TAGGAACAAC CAGTGACATT  
74151 GTAGCCCATC CAAACACAGG GTAGGAAGTG GATGCTGTGC ACTCTCTTTT  
74201 GGTATATAAG AGCAGGAACC CAGTAAAGGC ACCTTTTATA TATCTATAAA  
74251 GTTGAATATA TAAGATATAT GGGGGCCAGG CACAGTGGCT CACACCTGTA  
74301 ATCCGAACAT TTTGGGAGCC CAAAGCAGGT GGATCACTG AGGTGAGGAG  
74351 TTCAAGACCA GCCTGACCAA CATGGTGAAA CCCCATCTTT ACTAAAAATA  
74401 CAAAAATTAG CTGGGCGTGG TGGCACACAC CTGTAGTCCC AGCTACTTGG  
74451 GAGGCTGAGG CAGGATACTT GCTTGAACCC GGGAGGTGGA GGTGCACTG  
74501 AGCAGAGATT GCGCCACTGC ACTCCAGCCT GGGTGACAGA GCGAGATTCC

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74551 ACCTCAACGA AAAAAAAAAA GAAGATATAT GGGTATGTGT AGAACTCACA  
74601 GAAGGGCAAA CAGGCCTTAA CAGGTGCTGA AAACAGGAAC TGGGAAGTTG  
74651 CCAGTACCTT CCTGTCTTTT CCCCTGGAAC CAAACGGTTT CTTACTTGCT  
74701 TCTCTCTGCA CTTCTGTCTC ATTTCCCTCT CTCTTCAGAT GATTTTTCAT  
74751 TGTTGCATCA CACACATAGA AAAATCAGGA TCCACCCCTCC CAAGTTTACA  
74801 TATCGTTTGT TCAGGCAGCC ATAGTATCCT TAAAACTCCA CATTCCAGGG  
74851 AGAAAGCTTG GGTCAAGGAT TCAGCCAAAG GGCAGCGAAA TGGAGTAAAG  
74901 ATGCAACTGC CAGGTCTATG GGCAGCAAGG AGGCCGGGAA GGAAGCCGCT  
74951 GTTGTGGTCC AAGTGACAA TCAACAGCTC AAAGCATAAG TAAGTTGTGT  
75001 GCTTTTCACA GATGGAGAAA CTGAGGCACA GAAGGAACCT GGCTGGGGTC  
75051 CAGGTCTCTG GCCTTTGTGT CAATGCTAGG TCACTGGATG TGGCGTCTGA  
75101 TTTCTACAGG AAATGTGGTT TCTCTACTTT GTCCCAGAGC CCACTCAGAG  
75151 CACTGGCTGG CCAGGGGGTC CTAGGGCCCT CTTAGGATAG TCTCAGGCCA  
75201 ACAGCCCCAG CAGACAAGCA ACCAAAGTGA AGTTATGAAA GAAAGCTCTT  
75251 TGCTGATCTG TCAATGGCAC CCTTGTAGAG CCAATACTTA GAACACCTGG  
75301 ATTTGAATAC TCATCTCCAA AACCTGTGTT CTTTCTACCA CGTGACAAGC  
75351 CCTTGTAAC CTCAACACGT CTCTATGAGG TGAGCGCTTG CAGATCCACA  
75401 CTTTAGATAA GCAATGGAG GCTCAGAGGG TAAGCAGCTA GTTCAAGGTT  
75451 ATGCACCTGA GCCAGGATGT GGACACAGCT CTGTGTCTGA TTCTAAGGG  
75501 CCTGTGCTTT AGCCACTTTG CAATACTGCT GCTGTCTGCT TCATTTCTCTC  
75551 ATCTGTCTGA TGGGAACGAT AATACTCAAC TCACATGGAT ACTGTATGAG  
75601 GAAAAACAGA TAAAAGAAGA GAAAGTGCTT TGAACAATA AGCAGCCCTG  
75651 GCAGATGGGA ATATTTTTTG CTGCTGACAC ACATCCTCAG CCTTGAGGGC  
75701 TCTGTGAGC CATAACCAGC TCAGAGCTCT GGAGGCACCT CCTCCCATC  
75751 AACAGCAGGG GGGACATCT GTCTTCATCC TGAGCAGGCT GACAAACTGA  
75801 ACCCACTCC TCCCTCAATG TCCCATGCT GGAAGGAGT ATAGCTCATG  
75851 CTGTGTTCTG TCTGTTGCT GAGAGAATGC AGAACCAGA ATTTGGGTCT  
75901 CAGCAGGTTG GGGAGAAAAG GAAATGTATT TCTTCCCCA AGATTTCTTT  
75951 TTGAATATAT TTTATTTGTG GAATCAGATT GTGCATGCAA GTTCTTCCA  
76001 GAAATGTAAG ACGTCGTAAT GATGGGAAC GTTGGTTTTA TAATTGAAGG  
76051 ATGGGAAAGG AACTGATAT TTATGGAGCA CCTGTTCTAT ACCAGGCAGC  
76101 TACCAACCA TCAGCCATTG TTGCAATGTT ATGCAAGCTT TATTATCCAC  
76151 ATTTACAGT CTGAGTCTGA CTCAGCAATG TTGTGTTCTA TGTGCTAGTT  
76201 CCCACAGGTA GGTGGTGCA GCGCTGGGAT TTGAACCCAT CTCCAAGGCC  
76251 TCCATCTTTT TACCACTGCC TCCCATGGT GGGGAGGCCA TGGACTGGCT  
76301 GTCAGAGATG TCCTTTCCAG TCTAGCAGAC TAGGAAGCTG CTGGAAGCTA  
76351 CTTATGCAAA GGTTCAGCAAG GAAGGAAACA GAGTCAGAAC TAGATGGGGC  
76401 TCCCTGGGCC ACTTTTCCAT GCTGGCCAC ATGTCCGGCT AGCAGTCAAC  
76451 ATTGGGTCTT ACCTGAGGCC ACCTGTGTTT AATGGAAACA TCCTGGACAC  
76501 TGCACAACT AGTGGGAGCC TGTGAGGGA CAGCCTGTCG GGTTCATTGA  
76551 GGTTCAGCCC AACTCATGAG CTAGGGCAGG TACCAGAGGG TGTGTTCCAC  
76601 CCAATGGGG CAGGTAGGCA GGGGACACAG GCTCCATTTT CATGACCAAA  
76651 GACTGAGCAG AGAGGCTCTC TGAGCAGTGG CAGAATGGGA AGTGTCAAGA  
76701 AGCTTTGTTT GACAATTGAG TCAAGAGGAC AGAAAAGACA GAAAGCAGAC  
76751 ATCAGAGTTG GGAAGGCTCA CCCAGCTCC TTGACAAAGG TGCATGAGGC  
76801 CAGTTCTTGA AGCAGTGACC CTGCCTTATG TCATGTGTTT ATCAAAGCCG  
76851 GCCCATGAG CCTGAAGTGG CCTCTGTGTT TAGAAGAGGG CCTGACATGA  
76901 TTCTCTGAGA AAGGATTTGA CAACAACAAA GTGTTGCCGT ATGTGTTGTC  
76951 TCATCCCTC AATAGTCCTG TGAGGTATGT GAGACAGGTG TTACTCTCTC  
77001 CACTTGGCAA ATAGGGAAA GAGGGCCAG AGAAGTGAAG CTGCTTTCCC  
77051 AGGACCACAC AGCTGGTAAA CAGTGTCCAT CTCAGCTGTT CTGTCTCCCA  
77101 CACCAATATC CCTGTGCACC ACGCAAACAC AAAGACAAC TGGACAACCA  
77151 GTCATCTAAT GAGTATGCAT GCTATGCTCT CTCTCATTTT GTCTTTCCAGG  
77201 GCTATACCCT AGGAGAGCTA ATCATTCTTG GTTAGATAAG AAATAGCCAA  
77251 CACTTCTGCA GCATGGTAGG CCAAATACCA CCAGAATAAA CTCAGACCCA  
77301 AAGAGATGCT CAGAATGTGT GGAGTTAATA CTTCACTATA CAGCTCTAAG  
77351 GTATAAGCCT TGTCCATCTG TCACATTATG ACATGTGCTT GCTCCCACCT  
77401 CAATTCTCTGA TTCCACATTA CAACAAATAC AATTTAGGC TTTGAACATA  
77451 CAATGCCAAT GTTTCTGAAG CCCATATTAA ATGCCAAAT CTGAGTCAGC  
77501 TACTGGAGGT AGAGACATGA ATAAGATGGT CCATATTATT TTAGAGGATT  
77551 CTTTGGTTGC AAAGGGCAGA CACCCAGCTT GAATTCACCT TGGAGAAATT  
77601 GGGATTTTTT TGGCTTGCA TAAAGCAAGCA TGAGAAAGAA AGTTCCAGGG  
77651 ATGATAAAA CCAGGAATGC AAATGTCTCC AGAATCTTTT CTTTTTCTT  
77701 TTAGGCCATC TTTTTTCTCT CAACTGGTT CCCTCCACTG GGCTGGAGAC  
77751 GTTACTACCA GCAGCACTCA GACCCACATC TTCAGTTTAA ATGTGGAAA  
77801 TGGACTGTCA GAGAACATTT AGGCCATTCA TTCTGTGGGA GAGATAGGCT  
77851 ATGTAAAAAG ATAGCCACTC CCATGTGAAC AATGTGGTTA GGATTAGAGG  
77901 CATGAATATA CCCCACCA GGGGTGTGGG AAGGAGGTTG AACTCTAGG  
77951 TGATAATACC CAGACCTTAA GGAGCTTTCT GTCTAGAGGG AGGTATGGAC  
78001 ATGGACAAGT AATCAACAGC TACAAAGCAG AGCTGCCAGC TCTGCAACAC  
78051 AAGAGCCCTG AGAGGCATGA CAGGGGCAGG GTGGGGATCC ATGTGGGTCT

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78101 GGATTGAAGT GAGGAGGGGC ATCAGGAAAG CATTCCAGGA GAGCTGAGGG  
78151 ACACCTTGAGC ACACCCCTCAA AGAATGACTG GGGGTCATGA GGTATACAAG  
78201 GGAGGAAGTG CACCCGAGAC AGAAACAATC ACATAAGCAA AAATGCAGAA  
78251 GAATATGAGG ATCGGGGGAAG GGCAAGTAGC TCAGTAGTGT TGGAGGCCAA  
78301 GGGACACGAA GGAAGGTGAT AAAGCCCTGA TGTTAAGGAT AGAAAAATCA  
78351 AAGTCCTTTG AAAATCATGT GGAGTTAGGA TCTCAAGAAC CCTACAAGGA  
78401 TTTCTTTTGA ATAGAATCAA AGAAAAACAA AGTTTACAGT CTGTGAGGGT  
78451 TGCATAGGAA GTAACGTGGT GAGAAATGTT GGCTTGAGAA CCACATATCC  
78501 ATAACACAAT GGTGTTTTAG AGGATTTGGG GGAAGGGAGA GAAAACTCA  
78551 AATTGTCTCA GTAACCTAATG AGCTTTCATG TACATTTAAA ATAGTAATAA  
78601 ATGCAATTGT GAGGATGATG GTGAGATGAG CAAAATAATC CAGTTTGTAA  
78651 TTGTAGTTAT CAGGCTGGCA TATCCTGCAG GTCACACTTC TAAACATGAC  
78701 TTCCGAAAAAT CAAAGATCAG CTAAGTTTGA AGTAAGTATT GAAAGAGGGA  
78751 GATTATGTTG CCTCAAGTTA AAATAGAAGC TAAAAGATGG TGATTCAAAAT  
78801 GATCAAAAGC ACCAAGCTTC CCTGTTAGGA TTCAAGGGAG GGGTGCCTGG  
78851 CTCCGACACC AGATATCTGC AAAGCAATAT GAAATGAGAT CAATAGTAGA  
78901 CATTGAAAGA TTGAAACTGA TATAGGATAT TCAAGTACCA GCTTCAAGAA  
78951 AATGAAATGA GACCTAATAA AAGAGAGTAG GAGTCAAGGG GGTATACGAT  
79001 ATTAAGAAAA GTGAAGAGCC AGGGTTTGTG GGAAGGAAGG GAGAAGAGGC  
79051 AAAGAGAGCA GCTCTTTTAA CACAGGAGCT TCCTCCTTTC CCATTCTCCC  
79101 TCCTGCTAAA AGCCGAGTTT GTTTTAGCTG AAATGATTGT AAGACAAATT  
79151 TTTATTATTA AAAAAGGAGC TATTTTGTGT TGGTTTCCAT TATAAAATCA  
79201 GAGCTCTGCT GCCATAAAAT TAAATCCCAT AATAAAATGA GTAGAAAACG  
79251 TGATGCTCTG CAGAAAGGAA GATGGCAGCC CACTCAGTGC CATGCTGGGC  
79301 TTGACTATAT ACAAGCCGTG CATCTCCTGC TGCAGATTGT AGCTGCTGCC  
79351 CAGCAGTGCA CATTATCGTT GCAGCTGTTT TCCTCACATT CTGAGGTTTA  
79401 TGAATCCCTT CATCCATCAA TAATTGATCT TTAGCTCTTA GTCCAGGGGT  
79451 TGTCAACTGG CACTCCATGG ACCTTTAGAG GATTGATGGC TAGGTTTTCA  
79501 AAGATCTTTT AACCCCTGA AATTATATAC AAAATACTGT GTGTGAGTAT  
79551 GTGCATTTTT CTGGTAAGAA GCACCTGAAT TATCGAAGCA GTTTGTGATC  
79601 CCCCAGAAAG CTAAGAAGTA CTTCCTAGAG CAAAGGGAGA TTTTGTCTCA  
79651 CTTAGAGATT TACACATTTG ACCAGGGCAG CTCACACAAG TGGGATGCGG  
79701 TTTACATTTT CATGGCAGAT CTGCTTCCAG CTATACAAAT TCATCAAGGA  
79751 AATATTGTAA TACTTCTATA TGAATCAGGA ATTCACTATA TTTAACTTAT  
79801 TTGGAATAAG AACCACTATA TATATACAAG TTTTCCAAA AGACTGAAGG  
79851 TTCTTCTGTG GGCAGGAAGG AATATGATTA GATTCATGAA GCGCCTTTAT  
79901 GTTTATATTT CAACTCTGAA AGATAATTGT GACTTTACTA AATCAAACTT  
79951 GTATACCACG ATTAGGAAAA TGTGGACTGA TTTGGGGTTC TAGGGGTAAA  
80001 ATGTGACCCG TGTGAAGTAC CAATGCACCG TTCTTTTATC TGTGAACGGG  
80051 CACTGAGCTT CTGAAATTAA TTAGTAGGCA GGAGGACATG CGCATATGAC  
80101 GTGATAGTTT AAGTACTGAT AATTATTAC TTGGAAGGGA AGAGAATAAA  
80151 ATTCAGAACCA CAGTATTCCT TAATGGGAAA TCAACTTAGA GGAGGTAGGA  
80201 GGGAGATGAA GCAAGAATAT TTCTGGTAAA ACATGCATAA ATCAATGGTC  
80251 AGCCAATGTG TTGATCAAAG AAATTATCTT TCGGGGAAAA CAGTAGAAGG  
80301 CAATTGAAAA ACAAGCATCA GGCTGCATAA AAACAGCAAA CAAAAGTCAC  
80351 AATGGCTTGA TTGTGTGATG AGGTAATTAA TGGCTGCAGT TAGCAAAATA  
80401 TGTTCAAATAA AAAGACAGAA AGGGTAGTTA CAGGAGAAAA ACATCCCCGC  
80451 AGATCTTCAA AATCAGAAAC AATGAAAATA ATTATTTCAA AAATTAAGAA  
80501 AAAAATCTCT TAATTATATC CTGAATTACC TGGATAATTG GTAAAATTTT  
80551 CTGCATATAC AAATCTTGGT CCTCTGCTCC TCTCTCTATA AATAAATAGA  
80601 AATGTATGAA TCAATAGTCA GCCAATGTGT TGATCAAGAA AATTATCTTT  
80651 TGGGGGAAAA TTGGTAGAAG CCAATTAAAA AACAAGCATC ATATTGCATG  
80701 AAAACAGCAA ACGGAAGTCA CAATGGCTCG ACGGTGTAAT GAAGCCACAC  
80751 AATATGTATT AAACACATCA TCTACACAGA TGGATTCAAA GATACCTTCT  
80801 TTGTGTCATA GTCCCAAATC TGTGTTTCC TGGCTCTGTT CCTCATATCT  
80851 AGTCATTCTC CAAGTCAGCA TGCCCACTT GAAAGTGTCA TTTTCAAAC  
80901 CTGCTTCTTC TCTTCTGGAA GTTCTTCTC TGCCCATTCG TCCACAATCC  
80951 CCACCTCTTT CACCCAGTAG CAAACCTTAA ATTTATCTTT TACTTTGTCT  
81001 TACTTCCCCT TCTTATATTC AAAATGTTTC TCACTTGCA CTCTTTTCAT  
81051 TCATTTCTATA AGCATTTATG AGCTCCTGTT ATGGTTTGGG AACTGTTCTT  
81101 CATGCTGGAG GTGGTCTTAT AAACAAGTAA TTCAATTGA GTATTAGTA  
81151 TGTTAAGTGC CATCCCAAAG GCAACACCA GCTGTGGGAG GCTCCCCAAA  
81201 TCAGTCTAAG GAAGTTGGGA AAAGCATCTC AGAGAAGATG GTGCTGAGA  
81251 TGGGGAGGAT GTGTGGAAGT GGGCAAGGAA GAGAACAAGT AACAACATTC  
81301 TAGAAAAAGG CCTCTTTCAG CATGCTAAGA AGTTTGGAGG ACAGAGGAGT  
81351 TACCATTCAA AATTGAGGAG GAAGGAAGAG CATACTGAG TTTGCCACTT  
81401 GAACAGATAA TTTAGCTGT GTTGGGTGAG TGAAGTTGAG TGGGTACAAA  
81451 TCAGGTCAGG AATATAAGTT AGGAGACTGT TACTAGAATC CAGGCCAGAG  
81501 GTGATGGTGG CCAATATATG AGAGTTTTAG CAGGGAATGA AAAAAAGAAA  
81551 ATGTGTTTCAT GAGGTAGAAG TAGGTAAAAA CAACAGGATC TGGTTCTCTG  
81601 TTGGAATGAG GGGTAGCCTG GAGAGGAAGC CAGAATGCAG GCAAGAATGC

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81651 ATAGTGGTAC CATCCACTGA CATAGGGATT AAAGGAGGAG AAGAAGCTTT  
81701 GGTAAAGAAA ATAAGAAGTT CAGCTATGGA ATGTTTGAAT TTGATTTCTC  
81751 TGATGAGGAG TAGTTCTAGG TGATGATAAT GCTCAGGGTG TAGACTTGAG  
81801 AGTGGATGGG TAAAGTAAAG GTTGAGGCTA TTTAAAGGGA AAAGGTCAAG  
81851 GAACTGAGGG CCAAGGATTT ATAATAAGTT ATCTTGGGCC ACTAAAGCCA  
81901 CGCAGGATGC TGGCAGGAAA CCTATGAGCC AGGTCTTCAA TGTTGAGTCC  
81951 AGTGACTCAG GTGTCAGAA GAGCAGGAGA AGCATTGATA GCCTGATGGG  
82001 GAAGGAGCCG TTACCTGAGA GTAGCAGAGA GAGTTATCCT AGCTGACACA  
82051 GCTCTCAGGG ATTTGCTTCT AAAGCAATCC TTAGGAAAGA AAGAGCAGTA  
82101 TCCACAGGAG ACTGGTGGGC ACTGGCTTCC CCAGAAAACC TACCTAGATG  
82151 AATTCTATTG TCAAGGGACT CCTATTTAGA TAAGGGGCTT TGTTAGTTCT  
82201 CAGAGCAACA CCAAACAGAT GTATATCTCA TTACTTGCCC CCACAACCTT  
82251 TCTGCTCTGG CCACATGGGC CTACCCACTG TCTGCTAAAT GCACTTCATA  
82301 TTTTCTTGTT TCAGTGCCTC AGTATTCATA ATCTTCTTTT CCTAATCTCT  
82351 GCCCCTCACT TACCTGAATC TTTTGTATTC TCAATGACCT GCTCCATCCC  
82401 AGCCCTTTCA AGAACCTTTA ATACCTACCA AGTGAATACT CTCTCCATTG  
82451 ATTACACACT TCCTGTAGCA CCTGTCTTAT AATTATGAAA TATTACCTAT  
82501 TGTACACATA TATTTCAATC TCTTGGTGGG CAGAGAATCC AATTTATGCC  
82551 TTGTCAATTT GTAGCACATT TCCTTGACATA TGTAGATGCA CCATGAATAT  
82601 TTAGAGAACT TGTTAGTTAA TTTCTGTGTT AACATGGGCT GCAAAGTTCT  
82651 GGTCCATGCA CGTCTTTTAT AAAATAGAAA TGACGGATGG TGCATGGAGC  
82701 TTAATTTCCA TGAAGCAGAA ACATATGAGA GATGGAGCTG AATTTGTTTG  
82751 CCTGTACAGC TCTTACAGCA ATTGCTTCCA ATTTGTTTGA TTTACCTAAG  
82801 AGCTAAAATT GTAAATGGCA GCTCAAATGA TTTTCTGTGA CATTGAGAAA  
82851 ATGAGTTTGA ATATTTGTTG GAGAGTAAC TCTTAAGACA TGAAGGAGGG  
82901 GGAGATTATA GCTTTTAACT CTTTTTTATG GCAGAGCATT AAGGAAAAAA  
82951 AAGTGCAGAT AAATGAGATC AAATGGCAAG TGTCTGAACC TGCTGGACAC  
83001 AAGTCCCGGT AGCCATTGAT AGACAGTGTT TATATGACTT CTGGGCCATC  
83051 AATAGATAGA TAAGGTACAT CAGCGGCCAA TGTTCAGGA AGTTTGAGAA  
83101 GATAAATGGA AGTTGCACAG CAGCCTAAAA GCTTCCTTAG GAGGGCTGTG  
83151 CTCCTCCAGA CGGCCATCTG CCTGTGTCTT CCTGTCTTTC TTCTTCACAT  
83201 TAAATGCTTT TCCTTTTCTC ATTTTATGA TGGTTATCCT AAAGATATGC  
83251 TAGCCTGGAC TTTGACAAGG ACATCTGGAG ATAAGAAAAGA TTCTGAATTA  
83301 TTTTCCCTT TGGGCAATTG TAGCAATTTT AAACTATGT TAGATGGCTA  
83351 GAGATTCTTG AGAATATTTC TTTTCTGGA AAATCATAAG GCTTTGGATA  
83401 GTGGTACCTA TAGAAGCTGA CATCAGCAGC AGCCTGCCTC CAGTCGATCA  
83451 GGGCCTTTGG AACTTCACGG GGCTCCTCTA CTGACAGCCC CATCGGTTTC  
83501 CCTCCAGCAC ACGTAAC TCA GCATTGACTC TGGGTAGTAG AGGGTGGTTT  
83551 ATGGAATCTG ATTCATCTCA GAAAGAGGTG GATGCAAAACA CATTCCAGGA  
83601 GCAGAAGGCT TGGCATGTCT GGTCTTAGGC AGAGGGAAC TGGAGATACTT  
83651 GTCCTATTGT TCTTGAGATT CCAGCAAAAA TAGCCCATTA CAGAGGAAGA  
83701 AGATATCAGG TCAAATGAAG GCTTTGGTGC TACAACATTG TCTTAGAAAA  
83751 AAAAAAGAA GAAATGGCCA AGTGCACTGG CTCAGCACTT TGGGAGGCTG  
83801 AGGGGGGCG ACCACTTGAG ATCAGGAGTT CGAGACCAGC CTGGCCAACA  
83851 TGGCGAAACT CCGTCTCTAC CAAAAAGTAT TAAAAAATAG CCGAGTGTGG  
83901 TGGCGGGCTC CTGTAATCCC AGCTACTCGG GAGGCTGAGG CCGGAGAATC  
83951 ACTTGAACCT GGGAGGCGGA GGTGCACTG AGCCAAGATC GTGCCATTGC  
84001 ACTCCAGCCT GGGCAACAGA GTGAGACTCC ATCTCAAAAA AAAAAAATG  
84051 GAAAAAAGAA AAAGAAAAAA GAAAGAAAG AAATTAATTT AAAAAAATG  
84101 TTTTTTAAAC AAGGAAGGC TTTGGGCTTG GAGTCCAATT AAGCTAGGCT  
84151 GGAATCCCGG TTTCATCTCG CTTCTCTGTG CAACCTTGGG TTTTACTGAA  
84201 TCTCTCTTAT TCTCAATTCC CTCCTCTGTA AAATGAAGAT AATGCTAGTA  
84251 CCTGTCTCAT CAAGTTGAAG GAGACTTAAA TGAGATGTGT TGAAAGCATT  
84301 TAGCATAGTA TGTGGCACAT AAAGAACACT CAATAAATGC TGGCTATAAA  
84351 GAAGCCAGAG AGAGACTCGG AGGTGATGAG AGAGGCCACA ATTCCCTCCA  
84401 TTTCATTGAA AAGCAATTTT TATTATCTCA TTTGAAAGGC AGTATAGTAT  
84451 AGTGGTTAAG GACATGCACT ATGGAGCTAG ACCTCCTCAG TTCACCTTCT  
84501 GTCTCTATCA TTTATTAGCT GTGACTTAAC CTTCTTGTGC CTCAGTTTTT  
84551 ATCATTTTTG AGAGAGGAGT AATAATAGTT CCTACTCTGG TGTGTTGTGG  
84601 AGATTTGATG AGTTAATACA TATAAAGCAC ACATAGTAGT GCCTGGAGCA  
84651 TATTAATGTA CATGTAAGTA TTAGCTGTTA TTTTATTAAA CAACATGTGG  
84701 CATAGGACAT ATTGGAACCT TGAAGTCTTT GAGGCTCTTC CCAGTTTCAT  
84751 AAATCAGAGA CTACAGTATA AATATCTGCT TACATGTCTG CTTTCCCAT  
84801 TGGACTGCGA AATCTTGAAG CTGTTTTATT CATCTCTGCA TAGCGTTGGC  
84851 ATCGTATTAT GATACCTGAC ATTTACCAGG TGCCAAATGG GACTGGGCAT  
84901 GTTGTAGGGA TTCAGTCAAT GTGGGTCAAT GCAGGCGGGG AGGTGGGTGG  
84951 GGTAAAGGT AAGAGAAGG CTTGGGGCA TCACATTAA GAGTACCAG  
85001 ATTGAAC TGC AAACATTGCT ATCCAGGAGA AATCAGGTCA ATATTTCCAC  
85051 TTCTATGGCA TACCAGTACA GTCCAAGGAG AATGCATAGA AGGAAAGAAA  
85101 TCATAATCTG ATTGTATGTG TTTTTTTAGT AGTAAATAAT AATAATTATT  
85151 ACTATTCCCTA TACAATTTTG TGTGTTGGTG TGTTTTGTTT TGTGTTGCAT

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85201 GAAAAATGGG GTGCTAATCT ATTCCCCTTC CCAACACCAG TGCTCAGAAG  
85251 AAATTTCCAC AGATAGAGAA GCTATAGGTT ATGAATTTGG CCTTGATGGA  
85301 TTCTGGGTCA CTATTCTCA ATGTTTGTCC ATGTCATGTG AAGCTCTTAA  
85351 GATAAAGAAC AATGTCTTAC TCGTCTTTTT AACTTCTTTA CCCCCAATG  
85401 CCTATCACAT ACTTTGCCCC TGGAACTCA ATAGACATTT GTAATGGAA  
85451 TTTAATTCTT GAGGTCCAGT AAAGCCTTTT TCCATCCTTC CCCTACTACA  
85501 CAGTTTGTCT AACCATGTCT TCCCTTCCAT CATCCACCTT ATAAACGTTA  
85551 TTACTCATTC TTCCATCACA TTCTTGACAC CTCCCATGTC CAATGTCAAA  
85601 CAAGTACCAT TTGGGAAACA GAATTCTAGG AATCTGGAGA CCTAGAGCTC  
85651 TTCAGACCTT GAAATCCAGT TTTCTGAGCT GAGACAGTTT CTTAATTTCT  
85701 CACTCCAAC TCGTTTCTCC TCTTTCTCAA TGGATATTTT CCAAGTCTCC  
85751 ATTAGGCATA TAGCAATTCC AGAAAACATT CAATTTTCCC TTCTCTTAAT  
85801 GCCATGCTCC AAAACACCAC ATTCCCCTCTA GACATTGAGC ATTGGAGAGA  
85851 GATGGAAAAG TACTTTGAAA ATGTGTGCAT GTGAGAAAAA TGCTAAGTGT  
85901 TCTGTCTGGT CACTTCAATG ACAAGTTTGC TACTTTAGAA ACTTGACTAA  
85951 ACAGAGTGTG AGGAAAAACA TGAAAGAAA AAAATGTGTT CAGCTTGGCT  
86001 GAATAATGAC CAGCAGGGTG AAAAGATAAG ATAACCACCC GCTCACAGGA  
86051 TTTCTATCCT CAAGCCCTAG AAGGTGACA ACAGCAGACA CTGAACTAC  
86101 TCTTAATGGA GGGTGTGCTA AAGAAGCAAC ATTATAGCCG CTTTATAGGAA  
86151 AGCAAATAGG AAAGTTGGTG AAATAGAGAA GATGCCTAAG CATGTGAGAT  
86201 ACCACCTCCA TCTTGAAAAA TAACCAAGGT GATACAATGT TATGCAGGAC  
86251 CCCTTAATTA AAACAGATTT AGTGATTAAT ATCAGGAGCA TTGTCAAGAA  
86301 TCACAACAAC AGCAATTAGT TACTATTGAG CAATTTCTGC TAAGTAATTT  
86351 GCAGGAGGGC ATCTCACTTA ATTATCACAT CCTTTTATAG ATGAGAAATAT  
86401 AGAGGCTTAA AAAGGTGCTT TTCCAATGT TATTCAGCTA TAAGTGGTCA  
86451 GTCATGACTT AAACATAGGT CAACCTGACA ACAAGATCTT CACTCTTAAC  
86501 TTTCTTTCTG TTGTGTAATA CCTTGTATCC ATGGAAATGG ACCATCTTCA  
86551 TATACTGCTT TTTTGCCTCT GGAATGTCCA GGTATGGATT GGGTAATGCT  
86601 CAAAGACAGA GAGGAATAGA GTATTAAAAA GATCCCTGGC CTCATTTTCT  
86651 GAAGACATGA GCCTAAGCTG AGCTGTACCA TTTACCATCT ATGTGAACCT  
86701 GGGCAGATT TTTGACACTG CTGGTCTCA ATTCTGTAA CTGTCAAGTG  
86751 GAAGTGAGCC TAACTGCATA GACTTCACTG GGCTGTTAAG AGAATAAAAT  
86801 GAAATAACTG TAAACAGAAG TGCCTAGTGC ACATGCAAG GATTATTTGG  
86851 GCTTTCTACC CTTCAGGGAT TAGAAGTTGA TAGTAGGCAA CAAGTTATAA  
86901 GAAATACAGT CAATTGTCTG CTGACCAGGG CTAGAGTTAA TTGTCTCTGG  
86951 AAAAAAGGAC TTGCCTCTCT TTCTCTCTCT CCTCCAAAC TTAAGACGTT  
87001 TGCAGCTGAA TCCCCAACAG GATTTTGTGT TCCTTTGGGA GAGAGGAAAC  
87051 AGACCAATAT ACCCCCCAAA CTAACCCCAT AATTTCAATT CAGCAGTAAA  
87101 GTGAGGTCAT GTATAACTGC CCTGCCCAAC CTGCAGGGTG GTTGGGAAAC  
87151 TCTGAATGGT CATGCATGGG GAAGCATTGT GTCCACTGTA AAGAGCTCTC  
87201 CGGAGATGAT AAATCTCATC AGAAGGCTTC ATGCTTGAGG CATGGATTCT  
87251 TGGAAAAACA ATCACTCTAC GTATGTGGTC AGAATCTAAA GGAGATGCTG  
87301 GGGAGAGGAG CTAGGTCACT CTCCAAGTG GAACAGTAGA AACTAATCAT  
87351 GTGGAGCCTA AACTTATGAA GGTTTTTAAA ATCAGAATTG GCCACCTTCC  
87401 TTTGGACCAT GAGCTCAGAT TGTGAGGTGT GACTAGGTCA CGTCTCCTTC  
87451 CTGCCCTGT TCCCTCCTC TCCCTACCTG TCCCTCCTTG ACCCCAGGAA  
87501 AAATTGCCGG GTATGAAAG TTAATTATGA CCCAAGGGAA TTGTACAGA  
87551 TGGGAAGAA AGAAATGCAT TCAAGAGCAT TTCCATCAGT ATTGAAATTA  
87601 CACAGAAGGC TGGTGAATTT GGGCTATCCA TTCTTGCCCT CCTCTGTGCC  
87651 CATAATTCCT TGGCCTCCTT CAATTTCAATT TTCCCTTTGG TTCAGAGGAA  
87701 TGCTTGATAG CTTAAGCTAG CCTCAGTTGG CCAAGCATTG GAGAAACAGA  
87751 GAGGTGTATG ACACAGCTAC ACTCCCATGG GGCTTACAGG GCAAGGTGAG  
87801 AGAAGACAGA AGTTGTATGT GCTGGGTGCC ACGTGGTAGC TACAAACATG  
87851 AAATGAGACC AGGTTCCGAA GAGGAAGAGG GCTTGCAGAC CTGAGTCATG  
87901 GGGACAGTTT CTTCAGGAAA TGGGATCTCA GCTCTGCCTT GTATGCAGGG  
87951 CTTACATAAT AAATATGTTT CATTGTTGTT GTTGTATTG TTGATTTAAT  
88001 AAGATTTTGT TTTAAGAAGA TTTTGTAAAA ACAACTGAAC AAATGCAATG  
88051 TCCTGCCAGA GCAGGCAGCA GCAAAGGAGA TTAGGAATAT AACCCCTTG  
88101 GAGACGTTCC TTCACCTACC TGGTGCTGGA TTACCTAAAA GCTTCAGCTA  
88151 AGTAGGGTCA CCCCCCAAG AAATTATTTT AAAAAAATTG AAATCTGATA  
88201 TTTTATAGAA ATCTTATCAA GGATATTAA TTGGACTATT TACACCTATT  
88251 TAGGGTCAGT CGGTTTTGGA CAAGTATGCA GGGGTCTTGG AATCAGACCA  
88301 CTGGGGTCAA ATCTAGTTC TGTCACCTCC TAGCTGGGTG ACCTTGAGCA  
88351 AAGTTACCTG ACTTCTAATA GCTTCAGATT CCTCATGGGC AAAATAGAAA  
88401 TGCTACTAGT ACTTAATAGT GCTCTGAGAA GGATTCAATG AGAAGGATTA  
88451 AATGTATGTA AAGCACAGTG TTTGCCCATG GGAAGCTGTT ATTTATAAGG  
88501 GAGGGGAGCA CCTTAAGGTC CTCCGAATTT AGGAGAACTA AAAATCTTAC  
88551 ACTGACTTCT CCCTTCAACA GCACCTTCAG AATCTCCTTC ATTTTTCATA  
88601 CTGTTCTTTC AACCTTTTGA TGAATGAGAA ATTAGGCATT CTTTCCCTGC  
88651 AGATTTTCCC AAACCTTCTG CTTTGGCCAA TAAACATATT TTTAGTCCCA  
88701 ATCTTGACATG CTCCTTTGGG ACTTTTCATC TGATAAACAT CCCCTCCTGT

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88751 GCTCTTGAAT CCAATACCCCT TCTTCCCTGC CCTCCACCCA GAGTCTCCTT  
88801 GTATCTGCTG TTAGGCACAA TGATGACCCC ACCAAGGTCA GACAATGGCT  
88851 GTGGCCTCAC CTGGACCTTG ATGACCCACA TAGCCTAGAG CCCAGAGATC  
88901 AGCCACTGAT GGAGGCCAG AGGGCAGTTG GAAACTTCA CAAGACAATC  
88951 CAGCCTGATT GTTTTGACAT GCCTGACTTC AGGCTGCTAA AAATGAGCTC  
89001 GAGGAATCAG ATAGGAAAAA GAGATAGGTG ATGCAATTTT ATTCCATCTC  
89051 CCAATTTTCT GAGTCAAGAG TTGTTTGTTC AACTCCAGTT AAATTAGTAT  
89101 TTATCCAAAT TTCTGGGTG CTTGTCCAAA GAAAAGTACC CCAGATCTAC  
89151 AAATTAGAAT CTGGGACTGG GACTTAGGAA TTGGCACTTT TACAATTATA  
89201 CCAGATGTTT CTAATATGAG TACTTCAACC ACTACCTTA TAGAAGTGCT  
89251 GCCTAGGACC CTCTCTTCTG GCAGGTGAAG TGAAGGAGG TTTTGTGCGA  
89301 GGGAGATTCT CCACTTCAAC TTGAGTGTCT TGGCTTGAT CCGCTTTGTT  
89351 TGGTTCTATT TCACCAAAGG CTTTCATCTT CACATAAATT TTCTTCAGCT  
89401 TTAAATAATT AGTTTGTGTA ACCATTGGTA TACTGGAAG AACATTAGAT  
89451 TTGGAGTCCA GGTGGCTTGA GTTCAATTCT CTGCTCTGCC ATTTACCAGC  
89501 TGTGTGACAT TGGGCAAGTT GCCAACCTAT CTATGTCATT TCCTCATGTA  
89551 AAGATAATCC CACTTCACCA GGCCACTTTT GAGGACCCAG TGAATGATG  
89601 TGTAACCATT TTAGGAACAC TGGATCATT TACAGTGCAA TTTTTTACAT  
89651 CAGCTTGGAG CTTACCATGT AGGCATTCAA ATCCACTGAG TGTATGGAGC  
89701 TCCGTGCACA AATAAAAGGA CTTCTCTTTT CTGCCCGTGT ACAACTTTGG  
89751 TTTCTTAAAT CAATAGAATC CATGACAATC CTGGGCCATG GTATAAAGAT  
89801 GGGACTTTCT TCCTGTGAAG GAGTCTGGTC TGAACATCTT CCAAACCTCCA  
89851 ACATAACTGA TGTCAATTCT CCACCAACC CCATTGCTG TCTCCTGACT  
89901 CAATTGCTAG AGAAGCCACT TAAGGAAGGT TCCTGGAGTT AAGGCTGTGT  
89951 CTGGGCCAGT GTAGCGAGCA GTTTTCAACA GTCAGTCCCT TTTATCTTCT  
90001 CTTTCTCTGC GAGCCTTAC TAAGCACTGC CTCCTCCTGT CTCCTTACTG  
90051 CATCTCCTGA TGGAAATGCAC AGGTAAATCT CCTTGGAGAG TACCAGCCAG  
90101 GAACAGTCCA CAGCCAAGGC CACCGATCCT CACCGCTGAG CTCCATCTTT  
90151 CCTTTCAGC TGTCTTCCC CTCCCCCTCC CACCATCACC ATAGCAACAC  
90201 AGTGGTATAA AAAAATGAAA GCGCTAAGGC ATCTAAATAT AGTCTGAGTA  
90251 TCAACTCTTC CAGCATGGAG CCGAAAACCT AGGGAATGAC AGCTAGAGGC  
90301 ATCCAGACGA TAACTGGCAG CCAGGAGGGT GGATAAGTCA AAGGAAGGGG  
90351 TCAAGGAAAG AGGGGAAGGA AAGGGAACCA TCACTTGCTG AGCCTGCTGC  
90401 CTGTGCTTTC TCATGTCACC CGCAGGACAA CCCAATGTGA ATGTTATCAT  
90451 CTCCAGGTAA CTGCTGAAGA AACGGAAGCT CAAAGAGGTA AGAGATTGG  
90501 CCAAGGTCAC ACAGCTATAA GCAGTAGAAC TAAGATTTTA ACTCAAGTTT  
90551 CTATGGCCCC AGAATTTATG TGTTTCTCTC TCCATACCAC AGGGACAGGT  
90601 GCAAGTGAGA GATTTTGCTG GAAGCACTGG GCTTTTGGAG CAGGCCATAT  
90651 AAAAATTTCT AGCCAGAGC TCAACTAAAT TATTGGAAGA GACTGGGCCA  
90701 AATATAAGGC TTCTATCTAA GCAGCACCTG TGTTTCTCAA GGACTGAGGA  
90751 AAATGAAGGG GGAGGGTTGG CAAGGCTGCA TTTCCAGGG TGCGTGATTA  
90801 TATGGCATGG GGGTGGGGGC CATTATGATG CCCGGACATG GAACTTACAC  
90851 CAGTCAGAAA AGGGTGTGAT TAGAAGCCCT AAGCCAGAGA ATGTTCACTG  
90901 TGATAAATGC CATTATTTTT TCCCTCATTC ATTCAATAGA TTTTTTTTTT  
90951 AGATGGAGTC TCACTCTGTC GCCCAGGCTG GAGTGCAGTG GCACCATCTC  
91001 AGCTCACGGT AACCTCTGCC TCCTGGGTTT AAGCAATTCT TGTGGTCCAG  
91051 CTTCTGTAGT AGCTGGGATT ACAGATGTGC ACCACCACGC CTGGCTGATT  
91101 TTTTTTTTTT TTTTTTTTTT TGTATTTTTT AGTAGAGACA GGGTTTCACC  
91151 ATGTTGGCCA GGCTGGTCTC GAACTCTCTG CCCCAGTGA TCCACCCACC  
91201 TCCACATCCC AAAGTGCTGG GGTACAGGT GTGAGCTACC GTGCCTAGCC  
91251 TCATTCAACA GATATTTTTT TTAAGCATCT GATGTGTGCT TAACTCTGGA  
91301 AATATAGGGG TGATTAGAAC AAATGCAGCT CCTGCCCTTG TAGAGCTTAT  
91351 TAGGATAGTG GAGAAGACAA ATAAGGAAAC AATTATACAA TTGATTGATT  
91401 CTTTACAAC GTACATGTA CTATAAGTAC ATAACAGAAG AATATCACTT  
91451 GCCTGATGAC TTCAGTGAAG GGGAAATACA GAAGTCTTTA CAATCAAAG  
91501 CAATCCCCTG GGCCAATTGT AAAGGTGATG CCCACTTTCA AGGTGGACAG  
91551 AGACTGTGCT AGAAGCTTAG CCTCAACCAT GGGTTTATAT GATTGGTAGA  
91601 CCCTGCAGAT CCATTCCCAA TGGTGTATCT TCATACTAAT CATGAAATCC  
91651 ATCTAATAGC CATACAAGTG AGGTTTTAAA ACCCAACAAA CTAGACTCAA  
91701 ATGAAATCTG ATGAGGGAAT TTATGATTTG TTCTTCTTAC AGCCTTTGGT  
91751 ATCACTGACA TAAACTGAA TGTATGTGCT GAGGGTGCTT GTGTCTTGGT  
91801 GATAGACAAG GTAGGTGGTC CAGCCCATGG TACTGGCAGC TTAAAGTCAG  
91851 CCAGCCATCA GTGGGAAGTG CCTGTGAATT ATGCAGGAGT GGGAGGGGAG  
91901 GGAGTAGGCA GTAAAGTAAT GCATTTCTGT GGATCCAAAG CTTTCCAAAC  
91951 TACCTGCAAG TCAGCAAATA TGGGGGATGT TGTATGACTA AGTGAGAATC  
92001 AGATAATATA ATGTGTATGG AGCTCTTTAG TTCTTCAGAA AAAAATGCTG  
92051 TCTAAACAAA TAGTGTGAT ATCAAAGATA ATGATACAGT ACCCTAATTT  
92101 TAATGCTCTG CTACCTACCT GCCAGCTGTT TCCCAGGGAT GTGGTAAAGA  
92151 TGAATGGGCA AGATCTGGGA AAGTGTTTTG AAATCCTTGA TTAAAGGCC  
92201 TCCAGGCAGA TGTAGAATTT TAAATGTGTT ATATTACTGC CACTATTGTT  
92251 ATGCTTTCTT TTATCACCCC AGAATTTTAC CATCTCCTGT TTCAGGTGAA

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92301 CGAGTCTGCC TGA CTCTTAC CTGCCCTGAA TGGCATTGGA AAGGTAGCAG  
92351 CCCTGAGATG TGCCATATAA ACAAACATGT TTTTAACCAA GGGATCAGGA  
92401 GGCCTTCCTG GCTGGCTCCT GTCAGCTGGT CATCACCTCT CTATACTCT  
92451 AGGCTTTCCC AAGCTTATTT TATTTCCATC AATAGGACAG GAATATGTAA  
92501 ATGTCCTGCT TGAATGAGT ATTGGCTACA AGCCATCTGC CTCTGAACAG  
92551 AGGTGAAAAG TGGAAATCGG AGGAAGGGCA GATGTCTTTT GCAAGGGAAA  
92601 CAGACTGTTT TCTGCCACTG CACTCTGCCC AGGCAAAAGA GTAAAGGAAC  
92651 AGCACTCAGG AGAATTCACT GAAGCGAGGG CAGGGTGCAA AAGGAACCTG  
92701 AGAAATTGGT ACTGGGACCC AAAATCAGAT TCTGGCATT TCTGGGAAAAG  
92751 AAATGGGCAT GGGTGGGGGT TTTATCTGTC AATAAAAGCA TCCAGAATGG  
92801 GGCTAGAAGG AAGTAAATTC AGTTGCCACC TCTGCCTACT GGACAGCCAC  
92851 GGAGAACTTC TCCTTATCCA AGGTGAGGGA GCCCTCCGGA GTACATACTG  
92901 ATACCATTGG TTCTCCACCA CATACCCCA TGGAGATAAA AACAGGACCC  
92951 TGGAGCCCT GTCCGTGTTT AACCAATGGG ATTGAAACAT GGAATGAAC  
93001 TGCCCCACAA TCCACCTGT GAGAGACCAA AGAGCAGTGT TGGATTAACA  
93051 GGGAAATGTTA CCCTGAAAAG GCATTGAGCT TCCACTGGGG CAGCAGGTAC  
93101 AGTGCAAGA TGATCCCACT TAAATTCCTA AGACAGGAAA TAAGGAAAAG  
93151 TGTGTGGAA ACTCAAGACC TCTCAAAGCA TACTCCTTTG TAGTTCTTCC  
93201 GCAGACCAGA CCACGGAATT CAGAAAACAC CCTACCTGGT TCCAAACCAG  
93251 CACCTGCCAA ACTTCTCACC CTCTTCTGAC CCTGTCCTGG GAGTTAAGAA  
93301 AAAAAAATC ACTTTATTGG TTGCTCCAGT TATAACTTAA ACAGACAGAC  
93351 CATCATCAA TTAAGTGACA TGTACGACTG CTTATTGTAT GCCAGTTACT  
93401 GTGCTGTGGG GTTTTGGTTC CATTATCTCA TTTAATCCTC TCAAAAACCC  
93451 TGTTAGGTAG GTTTTATTAT TGCACATC TTAGATTAAG GAACTGAGG  
93501 CTCATAGAGA TTCGGTAATT TGTCAAAAGC CCTAAACAT AATTACTGCC  
93551 TCCAGATGTC TCTGATTCTA AGGCCCAGGC TCTTAATCAG TAAATGATCA  
93601 AATGAATAAT GATTTTCATG GCATCTGTCA TCGGAAAAGAA CAATGGAGAA  
93651 TATGCTTAAC CAAAGTCATA ACCAAATAAA TGAACCTGAC AGCAGAGCCG  
93701 TGATTCTAGC CAAGATGACT ATTTTCATGC ATGTTTGTAA GGCCAGGAAA  
93751 AGGAGGTTAG ACTTGTGTTG GAAGGGAAC AGGAGCTATC AAGGTGAAC  
93801 TTTCTTAAGA GTAGCCCAAT AATAGTGCTC GGGAGGGAGT AATGTGTGCA  
93851 AGAATAGAGT CAGGGAGACC AGCCAAGTGT GTGCCTCAGC ATCCCTAGCA  
93901 CAAATCACAC ACTAAGCATT AAGATTGTCT CTGCAGTGAG AAAGGCCTGG  
93951 GACCAAAATTT GGGCTCCACC ACTTACTGGT ATTCATTAAT CATTCTATGCA  
94001 TTCATTCAAC AAATATATAT TGCGTGTGGT CTATGTGCCA GAGACTGTGC  
94051 TGGGTGCTGG CAAAGAACAC AGACAAGGTT CCTGCTCTCA TGGAGCTTTT  
94101 ATTCTGATGA AGGAAACAGA CCCTTACAG ATAAATAAAT AAACAAGATA  
94151 AAGGGAAACA GATATGATGG AGAGTAGCTG GAGGGCCAAG CAGACCGGGC  
94201 AGACAAGGTG GTGGCATGTA AGCTAAGACA TTTAAAAGAA ACCTGGTCAT  
94251 GAGACTATCT GGAGAAGGAA AGCTCCAGGC AGAGGAAGCA GGTAGTGCAG  
94301 AGGCCCTGAG GCAGGAATGA GGACAAGATA TTTGAGAAAA CAGAACAAAG  
94351 GCAGGCATGA CCAGGCCGAG TGGGTGTTGG AAAAGTAGTA GAAGGTGAGT  
94401 GGGGAGGTGG GGCATCAAG GTCAGGCTTT GCAGGCTTGA TCAGCGTTCT  
94451 CACTGTGGTT CTGGAGCCAG CAGCATCAAT GTTACCTGGG AACTTGTTAG  
94501 GAATGCAAA TCTCAGGCCC CACCCAGACC TGCTGAGTCA CAACTCTGG  
94551 GATGGGGCAC CTCATTGTGT TTTATCGAGC CCTCCAGATG ATTCCGAGTA  
94601 TGCTAAAGT TCAGAAATTC TAGGTTGGAT TATGCAGTTC AATTTTAATT  
94651 TTAAATGCAA TGGGAACCTA TGAAAGATTT AAGTAGGGGA GCAGCATGTT  
94701 ATAATTTCT TTAATAAATT GTTTTAAAGC ACTCCTGCTG AGGAGAGAAT  
94751 GGACATAAC AGGCTAAGAG AAATGGAAGC AGGGAGATAA ATTAGTGGT  
94801 TATTGCAAGT GGCCAGGTAA GAAGAGAAAG TGGTTTAAAT AGGGTGGTGT  
94851 GGCAGAGAAG ACGGTTCCAA GCAGAGGGGG ACCACGCTGA CAAATAAGCG  
94901 CGGGCCACTC ACGCAAGCCC AACAAGGCAG AAGGCAGAAG GCAAAAGTGA  
94951 AGGCCAGAGA AAACCTGGACA CCACCTTTCC AGAGCACAGT TCAAAGGCAA  
95001 TGTCTCAAAA GAAGACACTC CACCCTCCTC CCATTTCCCTC CCTATTGCC  
95051 AAAAATAAGA AGGATACGCG GCCTATGGCA AACCTTGGGC AGGCACGTGG  
95101 GAGCTGAGCT CTTGCAAAGG GCAGATAGTT CCTCTGGTGA GAGAGAAAAG  
95151 GAAGGGCCAG TGAGGAGTGA AGGAAGAGAC GAACAGAGAG CCCGAAAGGC  
95201 TGAGAACGTT GTCTGGCTTC CTGAAAGGCT TAAGGGGTTA GCTCTGGAGG  
95251 GTGAACTAAA AGCCCTAGTT ATATTAAACA CACACGCACA CACGCACGCA  
95301 CACACATGCG CGCACACACA CACACACATA CACACAGTTG AAGGAGACCT  
95351 GCAGTTTCCA AAAACAAGAG TTGTATTTTT TTTGTTTATA TCATGACCCA  
95401 TAACAATCTC AAAAGAGAAA CAATCTCTTG TCTTCCTTGT TTAGGCTTAG  
95451 GAGAACCTGT AGTAAGTAAG CAGCAGCAGC GGAACCTCAA CTCGACTCTT  
95501 CCTACTGTCA TTCTCTCTAT TACACCACAA GGCATCAGAG GACCACTAGA  
95551 GTCGCTCCC TAGGGTTAGG GTTAGGGCAA GGTAAATGAA GTGAGTCAGC  
95601 AAGGGCAGGA TAGGAACCTG TCTTTATTAA CATTTTGATA TTTTGTAT  
95651 CATGGATTGG TTGCATTAAT TGCAACTTTT AAAAATCATT GCATTAAAT  
95701 ATTATTGATC TTGATTACTG AGTTTTTAGG TGTACCCTTA AATGTTGCAC  
95751 CTCTGACTTA CTAGTCTCAC CCTGATCCCT GTCCTGGATC TATGCCTGTC  
95801 TGTCTATAT CAGCCTCTTG CTTTGACCAT AAGAATAACT TCAGACCTTT

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95851 AAGCATAGAG GAAATAGGAT TTCTGTCTCC CTTCCCCACC TTTGTGATAA  
95901 TCTCAGCTTC TGCTTTTAAA GTCTATCTCC CAAGTAGTTT GCCTACTATG  
95951 TTCCTCCCAA GGTCACTAGG TTCTGTGAAA CTAGCAGCAG GCTAGATTGT  
96001 CACATTAGCA CAAAGGATCC ACTATTCCTG CAGCCGAGCT GGGACAAGCA  
96051 CTTAGGCCCA CTGACTCCAA CCCTTCAATA GCCTGGGACC TACGTTGTCT  
96101 CCAGGTGGTA TAAAACAAGA ATTTCCCTT TGACTGGGAG AAAAAGGGAA  
96151 GAACTCTAAA TTGGAAAACA GGTCATCTCG AATTCTCACA GGTGGAAATT  
96201 TCTGACAACC CCTTTGGGAC CCACAATTCA ACACACCCCA AATGGGGACA  
96251 GTAGCTAACA TGCAACCTGT AGGCTGTTCT GTCATCCAGT GCCACTGTGC  
96301 TGCACACCAC CAGGGGGCAG CATTCTCATT GGCTTCTATG TGCCTGGAGC  
96351 CCAGTGCAGT TGTGCAACAC TGCAGCTTTG CTTTAGTGTA GTCCCTGATG  
96401 GGTTCAGTCA AGAAAATGTC TATAGAATCA GCTAATCTCC CATGCAGTTA  
96451 AGTCTCTAAT TGAAATATTT TCTCTGCTCA GCCCAGGGAC AGCAATCTTT  
96501 CCTGGATTTC CTATTTACAA GGATCTCTAG AAATATATCA CCAGAAATAT  
96551 GGGCTTTCTC AGAGCTTGAG TGGACAGGGA ATTAAGGTGG AAGGCAGGGC  
96601 GTTTTGACTG CATTTGACCC AAGTCCTGAA GAGCCAGCTC CTCTCTCTTC  
96651 CTAATTATTA GAAGGTTTGT TTTGGACCCA GTGTTTCACG TGTATACAAT  
96701 ACAAACCTCT CTCTTTTCTA CTTGGATCAA ATTTGTTCTC TCAAAATAAG  
96751 ATTCCCAGCA GTGAGAGAAG ACAAGACAGA GAGATCCAAC ATCTCTAAAG  
96801 CCATGAATCA GATAACCAGC CACTTGTCTT CTTAGTGTCT GGGAACAGAT  
96851 ACACGTGTTAA ATAAAATGAT TTTATAGATT CTTCTCACTG CCTTTCCAAG  
96901 AAGGGGATTT ATCAACTTCA GGGCACAGCA ATCATTATTT CCCAGACTAC  
96951 TGGCATGCAT ATATATATAT ATTTACTTCT CTTGACTTAG AAAAAGAGA  
97001 GAATTGGAGT TGTGAATATT CCTGTCTCCC TCACCCAGC CCCCTTGAAG  
97051 TGAGTCAGGA CAAACTTGGG GCCCAAATGG AGCTGTAAGT AACTGAGTCA  
97101 CATGCAGAGA TGAACCTTC ACAGACCCAC TGATATGGAG GTTGAAGATT  
97151 AAATTCCCTT TTGAGAATAA CTGGGTAACA CTCATACAGA GACTACTTTC  
97201 AAGAAGGCCA GATCCTCCCT CTAATGTATA GTGCAACGTT CCTAACCTTC  
97251 AGCCCACTCC GTCATACCCC CACTCACATG AATACACACA TAAGCAGTAA  
97301 TATAAAGCAC TTCCCACCAT AGGGCAGCAA AGAAGGAGGG AAATCTTTAT  
97351 TATGGAAGAG TGGAGGAAG GAAGGGAAGG GAAGGGAAGG GAAGGGTAAG  
97401 AGGAAGAATT CTCAGGCTGA GCAGAGGAAT GACATGTTTG GGGCATAATG  
97451 AAGATAATTG AAGTGCAGAG TTTGTATGGA AAAATTGAA ATATCAGGT  
97501 GGCAGGCCAG GCATGGTAGC TCATGCCTGT AATCCCAGCA CTTTGGGAGG  
97551 CCCAAGCAGG CGGATCACCT GAGGTACAGA GTTTGAGACT AGCCGGGCCA  
97601 ACATGGCAAA ACCCCATCTC GACTAAAAAT AAAAAATTA GCTGGGTTTA  
97651 GTGGCGCATG CCTGTAATCC CAGCTACTCG GGAGGCTGAG GCAGGAGAT  
97701 CATTTGAGCC TGGGAGGCAA AGGTTGCAGT GAGTCGAGAT CATGCTACTA  
97751 CACTTCCCGT TGGGTGAGAG AGCTTTCTTT TTTTCTCTC AAAAAAAG  
97801 AAAAGTTCAG GTTGCAGAGA TGGATGGATG GATGGATGGA TGGATGGATG  
97851 GACGGATAGA TAGACATTAC AGAGAGTTTC CAATTCTTAG GATGAATTGG  
97901 AATCCTTAAG TCTTTATTCT GTAAGAAAGG AAGGGGAGAA TAAAATTTTG  
97951 TGATTTTAAA ATATTTTCTA CCCTGTAGAG CTACCCTACA AGGCATGAAA  
98001 ACCTTAAAAA AAAAGGCATC TACTTTAAAA GAATAATGTC TAAAAATTA  
98051 GAAATCCCTT CTTTTTGCCC TGACCTTTGG GAAACAGAGT GAGTGATCCT  
98101 TTTGAGGTTT TTGGCACTGC CTTGCCTGTG ATCATATCCT GAACCCTAGG  
98151 TCCATAATCA TGCAGTTACC TCAGATGTCC CTTTCCCTCT AGCCACAGGT  
98201 AACACGCTCT CCAGGCACTG GGAAAGTGGG TAATTAGGAA AGCAGAGGAG  
98251 TACCCATGGG CTGTGATGCC CAGTTATAAA CCCAGACATT TCAGAATTAA  
98301 CAGAATGAGC ATCAAGTCCT CAAATGGGTC TACATCCATA AACATGTCCA  
98351 GCAGTCAGCT TTTTACTGTC AGTAGAGACA AAATGTTCCCT ACACCTTTCC  
98401 TAGGGGAAGC CACATCCTCA GTAGGTTATC TCTGATGAGT CCAGCTAGTC  
98451 ACAGGTATGT AGAAGCTGCA TGCAGCAGAG GGCTCAAAGG AGGGTCCAGA  
98501 ATAGATACCA AAGCAAAAGG GGAGTCTGTG CACGTTCTCA CACGCACCCC  
98551 GAAACACTCT TTTTGTTCAC AAAATAGATG GTGTAGGTA GTTCCAAGAG  
98601 ATCATTTAGC TCAGGTTCCCT GCCTCCATAA AATAAATAAG CCTTCCATAT  
98651 TAGTTGTCTG TTGCTGTGTA GCAAATTGTC AGAAACGTAG AGGCTTAAAG  
98701 CAATACCCAT TTATTATCTC GCAAGTTCTG TATCTCAGAA GTCCAGGCAG  
98751 GCTTGACTGG GTTCTCTGTC CAAGTTCTCG TGAGACTGAA ATCAAGGTGT  
98801 TGCCAGGCT GGGATCTTAT CTGGAGGCTC TGAGGACATA TACGCTTCCA  
98851 ACCTTATFCA GGCCATCAGC AGAATCCCGT CTCTTGTGGC TTGAGGTTGG  
98901 AGGTCCCGCT TTCCTTGCTG GCTGTCATCC AGGGACCACT CTTTGCACCT  
98951 ACAGGCTGCC TATGTTCCCTA TTCACAAGAC ACCGTTCTAT TCAAAACCAA  
99001 AGCAGCATGT AGAATCTTTC TTGTGGCTCG TATCTTTCTG GCTTTCCCTT  
99051 CTTCTTTAGC CAGAGAAAGT TCTTTGCTTT TAAGCGTTCA TGCGATTCAA  
99101 TCAGGCCCACT CTGGATAATG TCCCTATTTT AAAGGTAAC GTGATACCGT  
99151 ATAACATTTC AGGAGTGATA ACAGCACATT TACAGGTTCC AAGGATTGGG  
99201 GCAGAACATC TTTGGGGGAA CATTTFAGAA ACTCTGCCTC CCCACTCACC  
99251 CATAATCCTT TTAATAACCA AATCTTGAAG CTTTTTTTTC CCAAAGGCCT  
99301 TTTTGAATAA GCACATTTAT ACCTAACTTC ATCAGACACC CACTTTGAGC  
99351 AAACACTAGC ATGTGGCAAA ATAGGCTGTA AATCAATCAG AACTATTCTT

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99401 TCCCACCACA ATCTTTCTCA AACACATTGG GAGAATCTGA CACTGTCAGT  
99451 GGTATACCAG AGCAGACTCC TACCATCTCA CAAGAGCTGA CTGTTAAATG  
99501 TTTAGTAATT GTGGACATTG GTTGTTAAAC TATTAGTAGC CTGAAATGGA  
99551 CTATAGTGAG AGTATTTTCA CCATGGAAAG CAACCGTTCC AAATCAGGGT  
99601 TTCTCTTTAT TCCTGGGAAG CTGGTTTATT AGCTCACCAC TGGCTGTAGT  
99651 CCTTTAGGGG TCATTACTTG ACCTCCTGTA GCATGCAGGA ATCCTCTCCA  
99701 TGGCCTTTTT TATGCATGGA CATCATCCTA TTTTAAATA CCAGGAATGG  
99751 GGTATCACT CTCTTATAAG CTAGTTCATC TCCCTGATGG AATGGTATGT  
99801 GGTAGAGTTG AAACCCACCT CCCTGGAAC TCCACCAAC TTCCTTTGGA  
99851 AGCAGCACTT GTGACAGCCC CAGAACCATT TGGAGTAAGT AGCATTTCCCT  
99901 CCAGGAGACA TCTCTCCTCT GGATCCACAA ATCAATAGTT AGATGCAAAA  
99951 TCTTTAGAGC CACACTGTTT GAATTCAATT CCCAGCTCTG CCACTTATTT  
100001 AGTTATAACC TTAGGCAAGT CTCTTAACCT TTCTGGTCCT CTGGTTCTTC  
100051 ATGTGTGGGA ATGGGGATAA AAATAGCACC TACCTCATAG GTTATTATGA  
100101 ATATTAAATG AGATAATGTG TGCAGAGAAA ATAGCACCTG GTCTGGCCTC  
100151 TACCTATCTA ACAGGTTAGT TGTGAGGATT AAATTACTTA ATATAAGCAA  
100201 AATGCTTAGA GCTCTGCCTA GCACAAAATA AGCACTATGT AACTATTGGT  
100251 AAGTTAATTT GAAATGTGGT TTCTAGATCT CTCATCATCC TAGTCACCCCT  
100301 ACTCTGGATG TACTCCAAAG TCCCTCTCAA GATATAGTGT CAGAATTGAC  
100351 CTAATTAGTC CAGCATTTGA CTGAAACGCT AGACTTTGAC TCCAGCCCCC  
100401 CATCCTTGAC TGGCACTAGC ATTCAAGCCG CTTCTCCTCT TTCCCTGGGT  
100451 CTTTAATAGA GTCAGAGCGA CTTCTCCAGG GGATCTTTTG GCCATGGACC  
100501 AGTAGCATCC ACACACGCTG GGGCCTTGT AAAAAGGCAG GCTCTCAGGC  
100551 CCCACCCAG ATCTACTGAA TCAGAATCCA CACATTAACA AGATGCTTGG  
100601 GTGATTCATG TGCACATTAA AGTTTGAAG GCACCGCTTT CAGGGACGAG  
100651 ATGACACACT TATTTTAAAG AGAACGCCAA TTAGAGACCC TAAGCCTTCT  
100701 CATGGAACAG GGGCCTTCCC CTCAGACCTT GGGAGAGGGG TCAGGGAAT  
100751 ATCAGTGTG GGTGTGTTGGT GACAGGTGGC GGTGGGGGGT TCAGTCCACG  
100801 TTCAAAGAGC CAGAAACCTG GCAGGGGAAG AGATGGGGCA GTGACACCCA  
100851 ACCGGAAAAA TAAAGGAAAC TACAAGAAGA ACCCAGCTAA GAGATGTGAG  
100901 GCTTCTGAAA GCTCCCATGG AAAGSTTCGC AGCTCCTCCA CCTGCTCGGT  
100951 CCAGCTGCCC CAGGTCAAGG AAGCTCTGTG AGTGTAGCT GACCCGGAGC  
101001 AGCAAGGATA CATTCAGAAG TGATGAAAGG GAACGCTTCT TGACAGGGTA  
101051 AAGAGTCATT CAGTAGGAAT GAGACAGGAA GAGGTCACAG AGTCAGAAGC  
101101 CCAGCTGTGA CTCAGAGATT ATTTCTGGCA TGGGAGGGCC GAAGGGTTAG  
101151 GAGGCCACCT ACTCACAATA CAATACAGAG GCAGATCCAC TTATTACCTG  
101201 CCTGTGCTGC TGGGATTTCA GTGTGGAAT TCTGTGCCCT CCACTGTGG  
101251 CTGCAGCTTG GGAATGACAT CCAGAGCTTA CCCACCTGCA TAAGAAATAA  
101301 GCTATAGGTG TAATAGGGGG ACATAGGCTA AAATCCTAGC TCAGCTGCTT  
101351 AATAGCTGTG CCACTGAGCA AGTTACTTAA CCTCTTTGAG CATCTGTTTT  
101401 CTCATCTTTA AATGGAAGT AATCATAATT GACCAAGCCC AGTGGCTCAC  
101451 ACCTATAATC CCAGCACCTT GGAAGGCCGA GGCCAGTGGA TTGCTTGAGC  
101501 CCAAGAGTTT CAGACCAAGC TGGTGACACC TCGTCTTAG AAAAAATACA  
101551 AAAATTAGCC AGGCATGGTG GCAGGTGCCT GTAGTCTTAG CTACTCGGTA  
101601 GGCTGAGGTG GGAAGATTAT ATGAGCCCGG GAGGTTGAGG CTGTGGTGAG  
101651 CCAGATTGTG CCACTGCAAT CTAGCCTGGA GACAGAGTGA GACTGTGTCT  
101701 CAAAAATAAA TAATAAAAT AATAATATCT ATGTTAATAA AGCAGAAATA  
101751 AGAATGAAAT AAGAGGCCTG ACATGGTGAC TTATGCCTGT AATCCCAGCA  
101801 CTTTGGGAGG TCAAGGTGAG AGGATCACTT GAGCCCAGGA GTTCAAGATC  
101851 AGCCTGGGCG ACTTAGTGAG GTCCCATCTC TACCAATAAT AATTTTTTAA  
101901 AAATTAGCTG GCAATGGTGG CATGCACCCG TGGCCCCAGC TACTCAAGAG  
101951 GCTGAGGCAG GAGGACGGCC TGAGCACAGG AGTTGAGGCT GCAGTGAGTC  
102001 ATGATCACAC CACTGCATCT CGGCCTGGGT GACAGAGTGA GACCTGTCT  
102051 CAATAAATAA ATAAGAAGAA TGAACAAGA AAGTTCTTCT TATGGTCTC  
102101 ATGGTGGTGA GCACAATGTA AGCATATATA TTATCTTAGA ATTCTTCTT  
102151 CCTGTATAAA GAAGGCCTCC TCCAATGTAT TAATCATCTG TTCAACTAAT  
102201 AAATGCTGCT TACTCCACT TTCACTCTAA AGGAACCTAA TGGCTAAAGA  
102251 GAACCCCTCC CCTTTGCAGC ACCCTGAGGA TCAGAGGCCT GATTTGAATG  
102301 TCCTCGATCG AAAGGACTAT TTCAAAAGGC CAGCCAGGCA GCCCAGACAT  
102351 GTATTTCCCTA ATCGTCTCCA GGTGTGTTGA TAGAAGATCT CCTGGGAGCA  
102401 GGTTTCCGCA GCAGCTCAGC CAGGTCTGTT CTGGGAACGC TGTGTGCATT  
102451 GGCACCTCCC TTGGCAGAAA GCTTGGAGGA AAGGCAGGTG CAGGTCTCTGG  
102501 AGCCTCTGAC AGCATTACTG GCTCTAGGAG TAGCTGCTCA GGATAATCTG  
102551 TCCCCATGAC CATTAAAGTA CTGCCACTGT GCGGGAAGAA GAACTGGAAA  
102601 TGGGGGGCCC AAAAAATCT GAAAACCTC ACTTGAACCA GTAAGTTATA  
102651 CCCTGGGTTG CTGTTGGAGA GAGCTTCTTT GGAGTAGACA AATGTGGTAT  
102701 GTTAAGTAAA CTGGGGATCT AGGTTTGATG ATACTGGGTC TGCAGCTTCT  
102751 TTGTCCCACT GAAAATCCTC GGGCATTCCA TGAAAGTAGC CTTCAAATAA  
102801 TTTTGTGCTC TAATGACATA TTTTGTCTGC AAAAAGATGA GTGGATTCT  
102851 TTTACGAAGT CTCAAGTGTG TTAGAAATTC ACCATGAGTC ACTCAGCAAG  
102901 TTATGTTTGA GGGCGTCTG TATGCCAGGC ACTGTGCTGG GCACTGGGAC

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102951 TACTGTAGCA AGTCAGATAG ACAAGAACTT GCTTGATCTT GGAAGTAAGC  
103001 AGGGTGGGGT CTGGTTAGTC CTTGAATTGG AGACTGCCTG GAGATACTGG  
103051 ATGCTGCAAG CTTTTGAAAA AAGACAAGTT CTCTGTACTT GCAGAGCTTA  
103101 CATCCAGTAA CTAACTAAC AACTTCAGGC TGTGTTGAGT GACTGAAAGT  
103151 GGTGGAGCCA GGAGTCCTCT AGATAAGGTA GCCATGGAAG GCCTCTCCGA  
103201 AGAGGTGATA AGTTTACTCA GAGACGCAAA CGATCAGGAT AAGCACAGAC  
103251 CCCGGTGAAG AGCGTCCCAG GCAGAGGGGA TAGCAAGGGG ATTGCCCTTA  
103301 GGTGGGAAAG GGCTTGATTT GAGGACTGGG AAGACCAGTG TGTCTAGGAC  
103351 ACATAAGCAA GGGGAGGACG TTATGAACGA GGTCTGAGGG GTCAGCAGCG  
103401 ACTGGATCAT GCAAGCTCCC ATAGGCCATG GTAAGGGCTC TGTGTGTACT  
103451 ACAATTACAG GATGCATGAT AGGACCTGGG CTGCATTTTT AATAGTTAAC  
103501 CCTGGCTATA ATGTGGGGAA GGGATTGAAG AAAGAGGGCA AAGGCAGGAA  
103551 CAGGAAAATC TCTTAGGAGG CTACTGCAAA GCCCAAGGGA GAGGTGATGG  
103601 TGTGTTGTTG TTGTTGTTGT TTGTTTGTGTT TTGCTTTGAG AAGGAGTCTC  
103651 ACTCTGTCGC CCAGGCTGGA GTGCAATGGC ACAATCTCGG CTCACTGCAA  
103701 CCTCCGCCCTC TTGGGTTCAG GCAATTCTCC TGCTCAGTTC TCCCAAGTAG  
103751 CTGGGATTAC AGGCATGCAC CACCATGGCT GGCTAATTTT TGTATTTTTA  
103801 GTAGAGACAG AGTTTCCCCA TGTGGTCAG GCTGGTCTTG AGCTCCTGAC  
103851 CTCAGCGCAT CCACCCGCTT CGGCCCTTCCA AAGCACTGGG ATTACAGGTG  
103901 TGAGGCACCG CGCTGGCCAA ATGATGGTGT TTTGATCTGG GTCTTAAAGG  
103951 CAGAAGGAAG GGGGGTAGTA AATTAACGTG GCTGGGGGAG AGAGGGAGGC  
104001 CTGAGAGTGA GGAAAGAATG AGGGGTGATT CCAGGTTTAG GAAAAGTGGG  
104051 CAATTTGTGA GATGATGGTG CCATTGACAG AAATGGGAAA GAACAAGTTT  
104101 GGAAAGAAAA CTCAGATCT GGCTGGTGAC TTGTATTAAA CTAAAGCCTT  
104151 CATTTGTGAC TTGAGCAGAA GTAAGGACTT TCTCCAGTGT TCAAGAGCTG  
104201 GAAGGGATTT TTCTAGCCTC CAGGCAAGGT AATACCATAA GTCCCAACAG  
104251 TGATGCCCTC CCTGGGAATG ATCTCAATGG GAGAATCCTA TACCCCTGCC  
104301 CCTCCATTCA TTCCTTGCTC TGATGGTGGT TCTGGCTGGC TAACCTAAGT  
104351 TACTCTTGCC ACTAGTTAAC GCCTGTCTCT ATTTCTCTTG TCCCCACCTA  
104401 AGATGTCAAT CAAAACAGCA CGAGCCATGC TATGTCACAT GACATGTTGT  
104451 CTGTCCAGCC CAGAGCTTGT TGCTGATGGG GGCACAGACT AGATTTTGAG  
104501 AGAAATCTCT CTGTTACCAC CCTTAACATT CCAACCCCTT CTAATAGCCC  
104551 ATTTAGGATT TATCATACTG TTTTCATCAA ACCTTTTCATG ACCTGATTTT  
104601 TATTTCCAGC TTCAACCACC CCTTGGGTCA CCACCTGTAC TTATTGAGTT  
104651 TCCTAGTATT TCTGAATTAA TGACTGAAGA TGATAAGCTT CCCTTACATA  
104701 TGACTCTCAA ACCACCAAAC TGGGATTGTT GTTACTCTTA GTGATAATGG  
104751 TTGCTATTTA TGAAACTTTT AATAGGGAAC ACAAAACCTG CCCAGAAATT  
104801 CATATAAATT ATTTCAATTA AGAACATCAC AAAGTAGGTG CTATTATTTG  
104851 ACCTTACAGC TGAGACTTGA AGAACTTTAG AGCATTGCCC AAGGTACCCC  
104901 AGCTAGTGAG GGGTGGAGGC GGGATTTGAA TCCAGCTCAT CTGTCTCCAT  
104951 TACCTGGAAG AAGGAAGGCC AGAGCATCAT GGCCTTTTAC AAGTTGAAGA  
105001 GCCACGGGCT TTCTACGGTA GCCAGCCACG CTTTTCATG ACTGGGGTGG  
105051 GTGTGGCAAG TGATGAGGGT TTGGAGTTCA TGTGGTGGGG TGCGAGGGAC  
105101 CAGGTGTCTT GGTAAGTCTT GTTGCAATTA CTTGAGGAGC AAAGGACCAG  
105151 ATCTGATTCT GCAGGATCAA CAATATGGAC ACTGCAGGCT CTGTAGACAT  
105201 CCAAAGCTCT AATGGTGACT TGGGGAAGCT CAGGAGGGCA GGGAGGTTGT  
105251 ACCCATTTAG AATGTAAAGA TTCTATTTT ATAAAAAAGA AAAAAAGGAG  
105301 ACTGAAGGCC TCAGTCTCCT CCAACAAAGC CAGGCTGTGG GGTAGCAGAG  
105351 TCTCAAAGGG TGCAAGGCCA TGGCCACTGC CCAGGGCTCC TGCTCAGGCC  
105401 TCCTCACTCC CACAACAGG GGGAGACCCA GTTCCACACC CACCCACCTA  
105451 GCAGTGTGTC ACACCCACCG GGAGAGGTCT AAACATCTTC CCTGGGAAAT  
105501 GGTCCCAAAA TGTCCTGCA GTAAGCAACC ATCTGGAGAG GCCCAGGTCT  
105551 ACATCTGTTT TTAAGCTCC AATAAATAAA TAAATGAAGG AAGAAAAAAA  
105601 GAAGAAGAAA TGCAAGACAG GGTGACTAAA ATTGGCATGT ATTTTAAAT  
105651 GTTTATATTA ACAACTAAC ACCTTTTAA ATGAAAAGCA ATATAATTGT  
105701 GCTAGCCACA AAATCATCGT AGGACTGAGA AAGGAATCGT GATTCTGAGA  
105751 GCCCTAGAGT TAATGTGATC CAGCTGGCTC ATCCCTGTGA CTGCAGAAGC  
105801 CTGTTTGGAG ATAGTGTGAG TAGCTTTTCA GGCCCTCTGT GAATTGCCAG  
105851 AATGTGTGAC ATGAGCCAAA TTTCCCCCA GCATCCCCGC CGCCGCCACC  
105901 ACCACCCCG ACCCAACCTT CCCGCCGCT CCCATAGAAT AGTCACTGCC  
105951 ATACAGAAAA AGAGAAGTTC TACTATTCTT GGGCAAGATT TCCACAAACC  
106001 AGTTTGTCCC TTTCTGCTTT CATGAAATAA ACCATTGGA TCAACGTCAG  
106051 CTGATTGCAA AATTTTCCC TTGCTCATAA AGCAAGACTG ATAAGGAAGC  
106101 AAACATGGGA GGACCTTAGT GGCCGAGCCT TTATGTGTAT GTTATTTTAT  
106151 TGCTCTCATA ACTGCCCTGG GATGCTGTAA GCATGATTCA TCCTGTTTGT  
106201 TTATCAGTTA AATTATGTAT CCAAGATTAC ACAGCCTATC CAGGATTAGA  
106251 ACTCAGAGCC CTCGGCTGTG AAGCTTGAGC TCTTTCTTTT CAGTCTTCAA  
106301 ATATGATCAT GCCATGAAGC AGCACAAAGC CCAGGAGGAG CCCAGTGAGG  
106351 CTGGAGGGGT CCACTGGCAG CCACTCTCCT CCGTGCCCTT GTGGTGTGG  
106401 GGCAAACTTG GATCTTTCTG AATCTTTTAA CTGTTTCCTT CTCTTCCCGT  
106451 TTTTGTCTGC TGCTGACTT GTCCTACACT CTACTCCTT CTATGATAC

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106501 TTATTTTTC ATCCACAGCA AAACAATTCA CATCAAGGTA ATTGATGATG
106551 AGGCATATGA GAAAAACAAG AATTACTTCA TTGAGATGAT GGGCCCCCGC
106601 ATGGTGGATA TGAGTTTTC GAAAGGTGTA GTACCTGTCT CTCACACTA
106651 AACTAACAT TCTTCTCTCC TCTTCTGTTT CTTCCTCTCC AACCCATTTG
106701 TCTCCTCCTC CTCTTGCTCT CCACCTCTCT GGTTCCTTT CCCTTGCTCT
106751 CTCTCTTGCT CTCTCTCTG CTCTCTTTT ACTCCTCCT CTCCTGTCT
106801 CTCTCTCTGC CCCAGCTCT GTCTTAACAC CTGCCAGCCT GACACATGGC
106851 ATCCATACGA GGGATGCTCA AGACCGATGG TAATTTGTTCT GGGATAAGGA
106901 AATGAGTATG GGGAAAGAAA GAGCCAAAAT GCTGGAGTAT CATGTGCGGC
106951 TCTTGGCTTC TCCAGAAATGG CTGGGCATAA AGGGGGGAAA AGGGACCACA
107001 TAGCCCAGCA CCAGACAGAA GAGCAGCACT GAGAAACAGG CTTTCAGCAC
107051 AAATTTCCAT GGGGCAGTTA TTCTCAGGGC TAACTTAGA GTCCCAGGAA
107101 GTTGAGAAATC AATGTATTTG GATTACAGTT CATTCCCCTC CCAAAAGCAG
107151 GCTTTAGGAG CCACCTTATC TGCCATGTTG CTACTATCAA GACTTGTTC
107201 TCCTCCTGAC CTTGAGGAG CTGAAAGTAC AGGTTTGAGT TCCAGATCTA
107251 GGTCAAATAT CCATTTGTCT TCCTATGTTT TTCTATTAA GAACACCAG
107301 GTGTGGAGCG AGAGAGTTAG AATAGTGGTG GAGATCATCC TGACCCAAAT
107351 GGAAGCTTCC CCAAGAGGTC CATGGGCTT CTCAGAGTGG ATGGAATCTT
107401 TGCCCTTCAAC TTCAATGACC CCATACATCC CATGGCCTCC AATAGACAAG
107451 TCAAGAAGTC CTTTCTGAA TAGATCATAC TGTGGAGCAG GGAGCTGCCA
107501 GTACTGAGGG CAATGTTCTT TCCCCTTCCA AGCTGTCCCT CATGCCCTCC
107551 AGTACATGCC TGTGTGACA GAGCACCCCA ATCCCATCCC ACAGCAGAGT
107601 TCCTGCAGCA GAGAAACAGG CTCACACCTT GTAGACAGCC CTGGGGTCCC
107651 ATATCTAGGG CCAACAGAAA TATTTCCAAA AAAATGCCTC TTGACATCA
107701 ATGAGCTTTC TCTTTTGTC GCTGAGCAAG GTATAAAAAG ATGTCAAAAAG
107751 AAGTACCCAA AAAGGTAATA AAAATGTACA GTCGTGCATC ACTTAGCAAT
107801 AAGGATACAT TCTGAGGAAG GTGTCTTAA GCAATTTTGT CATCGTGGGA
107851 AAATTATAGA GTGTACTTTC ACAACCTTAG ATGGTGTAGC CTACAACACA
107901 CCTGGACATAT GTGGGCTAT TGCTCCTAGG CTACAAACCT GTACAGCATG
107951 TGCTTGTACT GAATATTGCA GGCAACTGTA GCACAATGGT ATTTGTGTAT
108001 CTAAACACAT CTAGACATAG AAAAGGCACA GTAAAAATAT CGTAGTATAT
108051 AGCCTTATGG GACCACTATT GTAGATGTGG TCTGTCATTG AGCAAAACGT
108101 TTTTATGTAG CATGTGACTG TACTTGTAAA GTACACACAC CACAAATGCA
108151 CAGCAAGTCC TGTGCCCTAC AAGCCCCTTT GGGTCAGTCT ACTACATTAT
108201 AAATGGTAAA GCCGAGCACG CCCACAGAAG GTAGCAGGAA CATCAGAGGA
108251 TCTGAAGAGA CATTTAGGTA AATGCTCTTT ACCCTTTAGA GCATTTAGTT
108301 CTTAGGCCCTC CCTCCCCCA ATCTCCCCC CGCCCCCGC CAAAAAGAAA
108351 AAGAAAAAGA AAGCAGAAAA TTACAATTCT GGCTCACTAG TAGGACCTGC
108401 TAGCCACCAT TGTGATTCCA TGAAGGACCA GAAGAAACCA TATAGGAAGA
108451 ATCAGGCCCA CACGGCAACC TCTCCACATG ACAAGAGCC AGTCTTTGGA
108501 GGGCAGTGAA TTTCAAGGAA AGTTTCTTTC CCTGGGTGAC TTGTTTTTAA
108551 AAGATGTTAT GTTTTGTGTA GATACCCAGA GATGAACAGA AACTTCCATC
108601 ACCTTGTGCC CCAGACCCAT GATAATTAC ATTGAGGAAA CCAGTTTGG
108651 AACACATCAC CCCTAAGTGA TAGAAGCCCA AAGGTGATTT AGAATTTGAT
108701 GATTTACATC ATTTTCTTCA CATTTTCCCA GAAATGCATC AGCTGTAAT
108751 AGTAAAGGAT TCCTATGTAA TATTGTGGTT AATACATATT TATTTTAGTT
108801 CCCACCCTG AGGCCCTATG AGATAAAGAA TGAGAAAGAT CACACAATTC
108851 TACCTCCCTT TCTCTCTCT CTCTCTCTCT TTCTCTTCT CTCTCACTCT
108901 CTCTCTCTCT CTCTCTCTC TTCCTCTGTC TGGTTTTCT TCCTCATAAA
108951 TACTTTTCTT TTAATAATTT CTTTCTGAAA CTCACAATGG AAGTGAGTAT
109001 AGACATAAAG AAGGGACACA AGCCCTGGGT TCTGTTGACA TATTCCCTGT
109051 TGTGGGAAGA CCCTGGGTTA TTCCAGTGG GTTAGTAGTT TACCTGTTGC
109101 CCAGAGAAAT GCCACTGTTA TCATGTGACA CCCAGTGGAA TGTGCTGCCT
109151 GACTCACTTC CTACTAACTG TTGGCAAGGT CTAAATGAC TCCTCCTCAC
109201 CATTACCCTG CTCTGCCTT CTCCTCCCCT TCTGTCCTTC TGGCTCCCTT
109251 CCTTTGCCCA CCTTCTCTG CCTCTGGCT CCCTGCCCC TCACCCGTAA
109301 GAACAACAT GACCAAGAAG ACAAGAAAA CTAAGACCAT TTATTACCTG
109351 AGAACAACAC AATCCACCAT GGTCCGTGTT AAAGCCACCA TGGTGGGACT
109401 GGAATGCATG TGCCAGGAAT GACGGGGAAT GATTTTAAAG GCTGTGCTCC
109451 AGGTGACCAA CCAATCTACC GACCCAGTCG ACACACTCTC TCTCTTGTG
109501 TCCCTACAGG AAAACCATAA GGGTTAAAT AGTAGATGAG GAGGAATACG
109551 AAAGGCAAGA GAATTTCTTC ATTGCCCTTG GTGAACCGAA ATGGATGGAA
109601 CGTGGAAAT CAGGTGTGAG ATTCTTTAAA AACAAAAACA CAAAAAANA
109651 GAAAGAAAAA TTAACAAAA CTGAAAAACA ACAACAAAA AGAAAAAGCA
109701 GCTATATTTT TGCTCTCCCT CTTTTCTTCC CTCTCTCTCC TTCTCTTTT
109751 TGACCAATGG ATTTTTTAT TCTTTTCCCT CCTGTATTCT CGCTCTCACC
109801 CTGTTTCGGT ATCATCTCTG CTTCTTAGC CTTAGCTTAT TCCAAATTC
109851 TCCTTTACCG CCTTCTGGGC AGCACTGCAG CCTCAACTCC TCATTACCCT
109901 AATGAGTTAT TTCCTGTTT TGCTACAATT TTCAATTATT CAATTGCCAT
109951 GGGCCCCTGC ACTCTCCCC ACCCCACCCC TACACTGTAA CCTGTAAATG
110001 TGAAAAATTC TTGGTGGGTG GGGAGGAGAA GAAAAAAAAG GAATGTGATG

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110051 CGATGCATGC CTGTGCCCCCT TCCTGCCTTC CTCCCCCTGCC ACCCCTCACT  
110101 CTTTAGCCTG GATTGAATGT GGGGGGGTCT GGGATGGGGG TTGGGGCCTG  
110151 GGTTGCAATG ATGCTTTGAC AGTTTTCTGC TGCATTCCCC AACTTCCTTT  
110201 GAACGCTTGG CAGGTTATTC ACTTGTGGAG TGGCCCATAG GCCCCTCTGC  
110251 CCTTCGAGGA GGTAAGTGTA TTTTCTGGCT GTTTCACAGT TGGGCAGACC  
110301 GTGGCATGGG AAAGTGTACC AATGTGCAGA AGCCACGGCT TCTGAGAGCT  
110351 CTGAGAGAGA GAGTTGACTT CTGGGGTAAT CATGCAATCT GGAATTCTGA  
110401 GCTATTCTTC CTCCCTCTGGG CATCCACCCC CATGCCATTC TATGTTCCCTA  
110451 GCCCCAAGGT GGGTGCCTCA TTCAGGCTAC TTTGGGACAA TGCAACCTCT  
110501 AAAGCAGAAA ATTGAGAGTT CCTGAAGGGA AGGAAATAGT TCCAGGTATG  
110551 AAAATTCCCG TAGCCAGGGG CCCCAGAAAA GGACTGACAT TGGGCAGGCC  
110601 TGGAGTGTTG ACTTGTGGAT TTTCCAACAG AAGAGACTCT AAATGATGCA  
110651 GTTGGTGCTG ATCCCTGACA GACAGGTGTT GGAAAGGTCA CAGATGTCTG  
110701 CTTTGTCTTG GCATCTGCAA GAGAAAGTAC CGCCAGATC CCAAGATAGC  
110751 CCTCATCCCA CACTAGAGAA GTGGCCTCAT CTCTGCTTT CCTCAGGACC  
110801 TGCATCTGAG AATACCTGCC AGGGGCTCAT CCTAAAGGA CTGATTATGT  
110851 TGCAACCAGG GTAGAGTAA GGAAGGATTT CTTCCTTGA AGAAAATGAT  
110901 TGAAGCCAC TACTTTGAAT GGCTTCCAAT CATTTGGAGG CATAGATGTG  
110951 GGAATGGGTT AGGGTGTCTC TGGGAAATAA CAAGAGGACG TTCACACTCC  
111001 CATTCAGGAG AGATATGCTG CTGGGAGCCT CTTAGCAAAT GAAGCAGTGA  
111051 AATCCACCTG TTTGTCAAAA AGGGGTGATC ATACTGCAAT TAGTTCATAT  
111101 TCATGTGACA AAGAGCAGCA TAAACTTTC CACACGAGGA CAGAGCTAAG  
111151 AGATTACAGA ACAACATTCC CAAAGGATTC TCTACAGGCC TTCTCAGTGT  
111201 GATTGGTCAT TTCTCATTGT CTGCTGGGGA CTCTCCTGCA GAGCTGACCA  
111251 CTTCTGTGCC TGCCTGGGTT TGGACACACC TGATGCTCTA GGGGCAGAAC  
111301 TCCTCTCCTT CTCTACTGCT GGTTCCTTTC GTCACCACTC AATAAAACGT  
111351 TGCCCTCAGC CTGACTGCCA AAAAGTGCTG GAAGAAAGAA ATTATCTCTG  
111401 GTTCTATTGT TTCCACATT GTATTCTTGC CCAACTTCCA GTTCTTGCCA  
111451 CCAACAATAT TCTCAGAGGT TGCCCTCAGCA CCTGCCCTAC CTCATTCCCA  
111501 CCTCCCTTGA GCATTTATTC CATGTATTCA TAATTGGTTG CAGGCAGCAG  
111551 ATACCCCAAG CCAATTGTAA GTCACCTTCA TCAGTTTCCA CAGTCCAAGC  
111601 TACTTAGATG CAAACGAAAG CAGCACATGT ACAGCGTACA GGAAGGAAGG  
111651 CAGTGGTTCC AGACAGAGAG AAGAGATTGG AAGTCCATAC ATGCCTTTAT  
111701 TCCACCAGTA AAAAGGCTCT TCTCTTATGC CTCCCTTAAA ACCTCTACCA  
111751 ACAGCAGGAG AGAGAGTGAC CCAAGATAAG TCTTCAAGAG ACCTAACCAA  
111801 ATGCAAATGT CTTTGGCTAA TCCCCATTTA AGGACATCTT CCTGTTTTGC  
111851 ACAGATTCTT TGCCCAAGGA AATGTCAGCA ATGCCCTCGT GGAGGGAGTA  
111901 GGTGAGAAGA CAAGGATTTT AGCAAGCTAT CTGTGTGGTG TGCCCCCAGA  
111951 TCTCCCTCAGT CCAAGAGATG CCAAGATGAA GAGTGCCAAG AAGAAATTGG  
112001 TCAATTTTCC AGCTGCCTAT TTTATTGTCT ATGTTTTCTA GCGGGTTAAT  
112051 TTCCAGTTTC TTCAGTACTT CCCGTATTTT GACATTAGAC CATAAGGTGA  
112101 AAGGTCATAA AACCTGATTG TCTAGACTCA GAAGCAAATG GAAACCCATC  
112151 CAAATTTCCA GAATTCCTTG CTGTCTCAG AGTGAGAAAC AGAACAGTGG  
112201 AAATTGCTTT TCATTATCAC TACTGCATGG GAGAGTCTGA AACATTGAGA  
112251 ATGGCATAGT CTTTGCATGG TCAAAATGAC AATTGCATTA AAAAAATGAG  
112301 AGACTGGATT TGAATAGGA GACTCTATTT TTGGCAAACA AAACAGACTT  
112351 CAGAGTTTGA ATTAAAGCT CTGGATGAGC TGGGGGATGG AAAAAAGGGA  
112401 AGGAAAAAAG GGAGACTGAA TAGGAAACAC AGTTGCTCTG GAGTCTAGAA  
112451 GTGGACTTCC GAGAGCAACA CTGAGCAACA TAATCAAGAC TGTGGGCCT  
112501 GGGCCTGGAC ATTGGAAGCC TTCGGATAGA AAGGAAAGCT CTCTGTCTCT  
112551 CTCTCTCTCT CTGAAGAATG GGGCCTGTTT GGTCTCTCTT TTTGACAAC  
112601 CGTGGGCTCA TCTTGACAAG CTGCCAGAT GCTTCTAAT TACTCACAGT  
112651 CCTATGTCTT TTCCAGCTTG TCCCTGGGGT GTCTGAGCAG GAATAAATGA  
112701 CTCTCACCTG ACCCAGGGGA TCAATACAGG GGAAAGTTCA GCTCCAGCTT  
112751 CTCTCATGAG CAGCAGCAGG AAAAACACCC TCGAGGTATT GTGTCAGTCA  
112801 AAGCTGGCCT ACCCAGGTCT TGCTGACCCA TCTATAACTG CTGAGCAGAA  
112851 AGTCTTGGAT TCAATGAGAC AATGACCAGA GAATGATGGA ATTCAGCCA  
112901 ACTGCAGGCC TTCTCACTAC TCTAGGGATG GGCCAGATGT TCGGTGGCAT  
112951 GTATGAGTGA AAACAGGGC ATCAGGGACC TTTCTGGAAG AGCTGCCTTT  
113001 GTCTGACCCA CCTGTGTTCA TTTATGTGCT GGGATCTCTG ATCTCCCTTG  
113051 GAACTTGGGG GAAGCTCTTC CACGCAAACCT CCCGGAAGGA GCAGATAAAA  
113101 CAAGCTCTTG CCTATCTATC TATCTATCTA TCTATCTATC TATCTATCTA  
113151 TCTATCTACC TATCTGCCTA TCTATATCTA TCTATCTCAA TGTAGTGAGG  
113201 AAAGCCATTG ATCCATTAAC CTTTGAATTT CTACATGGGA GATACCTAAA  
113251 AAAGTGAAC TCTTGTGTTA TGTATCATGC AGACTCTGGA TCCACATATA  
113301 TCTCAGTGGC TGTGAATATA GGATGATTGA TCACAGGCTT GAGTTGCATT  
113351 CCTACAGATT CTTAGGAAAA AAATTGATTC ACAGACATGT CCCCCCTGGT  
113401 TCCCCACAA CACACACTCC TTCTCAGCA ATCTCTATCA GTCACCAACT  
113451 ACACGTTGAA TATGTGGCAA GCTCTTCCCA GACCTTTATC TGAGAGCCAA  
113501 GGAGTGAGGG GCTGTACTAA GATATCATAG AAATGAAAAA GTGGTGTGTC  
113551 ACAAGTTTCC TTAATTCTTA GATCTTAAAC TCTAAGAGGG TTCAGCATAA

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113601 GTACAAATTC AAGGGCTAGA GACAACCTGT ATTGGGTGTG TCTTTAACTC  
113651 AGTTTCCCAA TCCACATAGG GACCTTG CAT TTGTCATCTC TCATCTATGT  
113701 ATAGCTGTTG GTATGACAGT TTCTCTGTTC CAGAATACCT GAACTCTGAC  
113751 TTAGCCTGTG CTTTCTGAAA CAGAAAAATC ACCCAACCAG AGATCTATGA  
113801 GATCTATGGA AAAGACAGTT GCCAAAATAG ACAGCAAACA GCCAAACTTA  
113851 ATTGAACACT ACCACATGCA GGGACTTTGC TAAGCAGAGG TGATACAAAA  
113901 TGGGAGGAGC CCATAGCCCT AACTTCCAGG ATATATCTAC GGTAAGACA  
113951 AACCATTCAA GGAAACATT CTGCAGGACT TACCTTTTTG CTAAGTCATT  
114001 CTTTTAGGGG AAATCAAAGT TCTAGTCAAC GTGGCAGCTA GGAAGGCATT  
114051 TGTGGTGATG GAAACCTTAT GAGCACTGAG AAGCTGAGCA TGAGTTCAGC  
114101 TAAGTCGTTA GGGATGGAAG ACATAGACCT GGGCACTGTT CCACTCTTGC  
114151 ACAATGCTAC CCATTTCCTT GAGCTCCCAT TCAAGCCCCA TGGTCATTTT  
114201 TGCCACTCAT AAGTTAGCTA CTCTGGCAGG GTTGCAACTT ACACAGTTTT  
114251 CATGATAACT GGATTCTCAC TCCTTTTTTT ACAGAATGGA TGTGATAACC  
114301 TGGTATCCTA CACAGTCATG AGTGACCAAC CTACCCATTG GGTTCCTCAT  
114351 CCTCATTCCT CCATTCTTAG CCCTAGGGTA GCCGGGAAAG CATAGGAGCA  
114401 AATGCCCTTA CCAGGGCCCT GGTGCTCAGC AGCCTCTCCG GCTGCTCACA  
114451 CCTCTTGCTG CTGCTCTGTG CATGCTCCAA AGGCTGCTTT TTGCGTATGG  
114501 CTGCTGAGCT CTCACCTACT AAGCTCTCTG CTTTCCTTAT GCTGCCAGCA  
114551 ACCACAAAAC CTGGTGATAC TTTCAAGATG GGACATTAAT GCTCTTTCCT  
114601 TTTCTTCTCT CCATTTTCTT GGTATCCATT TGCAACAGC GCTCCTGTTA  
114651 TCTCCAGGTA AGAGGTGTCT TGTCCCCCTC TTTTCTTTC ACTTCTTGCC  
114701 AGTGCCATTA TTTGGTTTAA GACCAATGTC CTTTGATTTA TTGAATAAGA  
114751 ACTGCAGGCT CAAGTTAACC TGACAATTTT TCCCAAGGAC TGGGAGATTT  
114801 ATTTTCCCAAC ATGAAGCAAT TATGAGAAAG CAATTGTGAG GAAGGCAATT  
114851 CCTTGAGCAT CACTTCTGTC TGGGGACGTG GGTTAAGGCA TAGCTGATCC  
114901 TCTCTGGGAC CAGGAAGAGA AATTAAGCTT AACAAGGAGA TGGTGGGTCA  
114951 TAGACTTCTC CTGAGTCTTA ATTCATCTGC CATCTCATGT TGTGGGGGAA  
115001 GAGACAGTGA GATTGAGAGC TGGAACTCTC TAATATAATT GTGACAGGAT  
115051 TTGAAAAAAA AATACTTTAA TCCCAAGGGA TCCAGGAAAT AACCACACCT  
115101 GTTGTGAGAA TAGGAAATGC AATTTTAAA GAATCTGGAA TTTTACCAGT  
115151 CCTGGAGATC TTCCATCTCA TCACAGCTGA GACTTAAATT GCTAGAATTT  
115201 TGGTTCAATT GTCATTGACC CTTAAAGTCC TATGTGCCGT GAACAGATG  
115251 AATTAGGATG GGGGATTGGG GCAGTGTCTT GGCTGGAAT ATAAATTTTA  
115301 GAGAATTATC TTTGAAGAGA TTCTCATGCA GAATCTAGGT GCTATAGAGG  
115351 ACGTACACCT ACTTTGAGAG TATGCTTGCA TGAGTGGAAA CCAATCATAA  
115401 ACAACATTCA ACTTCATGAG CAGATATGAA AGCATTTTCA GCATATCTAG  
115451 CAATACTATA ACTCTTTGTG CAAGCAGAGT GGCCTACACA AGACAGTTTC  
115501 AATATATTTT TGAAGAACGT CTTACATTTC ATCAGTCTTT TGAACACAGA  
115551 AAAAAATGTT AAGGCCACTT AAGAGGCAAA ACATCTTACA GAGTTCATTG  
115601 ATATTCAAAG TCACCTACAG GCTACATCTT GGGTTCAGGA AGGGGCGGTG  
115651 TACATAGTAA GGACATACGC CTTCTGGGAG CCTTAAACAA ACAAAAAAAA  
115701 TGTAGTTAAT TCCTACATTT TTCTTTTGTG GAAAAAACAC AGTTACTCCA  
115751 GCTTCCTTGG CTTTTTGCTT CTTTTTTATA CCAACAAAAT AAGGGCTATC  
115801 CTAACCCCTC TGTTCCTCAT TCTTCTCCCA GGGTATTGAT TTCATAACAT  
115851 TGGGTTTTTC TTCTCTACTT CACTATCCCT CTTGCCTGTG AAGGTATGTA  
115901 AGGCTTCTTT TTCCCAACTC TTTCTCCAC CCGCCCCCCC TCACATAAAT  
115951 GCATAACAAA GATTGTGATT TAATTTAAGT TTCTTTCTAC TTTTAACATA  
116001 TTGCAACACA TCAATAGAAG CTAAATGGG AAAAAGGAAA TGTTTTCTTT  
116051 CCTAGCTCTT TCAATCTGTA AGCCTTTAAT TTAGGAGCGC TGATTAGCCT  
116101 TTCAATTCGT TGAATATCTC AAATACTGGT TTTAATTTTC CTAGGTGGAC  
116151 AGAGACAGAG GGAATATGTT CATCTGAGC TAACCACCCC CCCACCCCA  
116201 AGCTCAGGCG CCTTGCAAGG AGAGCACTAG CTACATCACT CTGCAGAGTG  
116251 TTCACAACAT CCTATCTTGG TCTGGCCTGG CAAGCTCTTT GTCCTTCCAA  
116301 TATTTGTTCA ATCTTCCATC CTATTCATAT TCTATCTTTC TCTCCCTCC  
116351 CAGCCTCTCT TCCTGTTTCT AGAACTGAGA GTTTATTTAG TCAGTCTGAA  
116401 TATCTAGATC ACCTGCCATT TATTCTCTTT ACTTGAAATT CTGAGGAGTC  
116451 ACATAAACAA GATATCAGAA TCACATATGGT CCTCTAAATT GAAGACTTAT  
116501 AATTCTCTCA AGAAATTAAC AACATTTGAA TTTAAAGGAA AGATCATGAC  
116551 AAAAATAGAA AAAGGCAGGA ATTATTGCCA AACCGAGAAA CTAGAAACTA  
116601 GAATTAACCT AAAGGCATGT GACTCAATCA ATTAACAAAT ATATACAGAG  
116651 AGCCTCTGTG GGACTGTGGG AGATCCAAAG ATAGAGGATT GGTATTTTGT  
116701 CAAAGGGATT TTGCAAGAAA GCTAGATGGA AAAACTGACT GTCACCACAG  
116751 AGGTGGACAG GTCAGTAAGT AGATCAATAT CCTGCCAGAT GGATATAGTG  
116801 CTAGATTGAT AGGTAGACAA GGGGTAGAC AGGTACATTT ATATGTCACT  
116851 GGAGAGCTCA TTATATTGGT ATAAAGTTAT TGTGTACAT GTAAAGTATG  
116901 ACATGGGGGA ATTGGGGAGG AAGGAGTGGG ATAATACTGT CGCTGCTAAG  
116951 ATAGGCATTG TGATATGGTG CTTAAACCTG CAAGTAAAGG AAAAGAGTAT  
117001 GGAATCTGTG TGTCTTTTTC TAAGGGCTTT TTCCAGAGT AGCTTGCAGT  
117051 CTGGCTTCTA GGGTTGCTGG CCTATAGCCA GAACCCTAGA TTCACCCAGA  
117101 TTTACCTTCA GAATTAACATA ATCAGAGACT CAAATTTCAAT AGACTAAATG

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117151 AAGTCAGGCT GCTAGAGGAT GTCTGCTGAC TTGGACATAT GCAGAAAGAC  
117201 ATGGATCCTT GAGAAAACAT TGTTCCTAAA AGTGGCCACC AGCACTAGAG  
117251 GAAGGACAGC ACCACGGACA GCTCCCAGAC ATTTTAGGAT TGCCTTCTGT  
117301 GTTTGGTGCC CGAACACTGA GCAAAACAGC GAACTCAGGA AGTCTCCACA  
117351 CACTCTCATA CCATCTTCAT GCAGTCCAAC TAAGAAAATT CTTACATAAA  
117401 ATATAAGGCT GTCTGCTTGG TAATTTAAAC CCTTGGCTTA TAGTCTTTTC  
117451 AGTGAATTTT TTTCTTGCA AACTCGAGAG TTGGAGTCTC ACGACTGCCC  
117501 TTGCTTCACC AATTCCCCAG CTAGAGACAA AAGACCTTCT TGGCCTCTGA  
117551 CCCATTTTGT CTTTGAGATT ATCCAAGGAC TACAGGATTG CCCTAGGAGG  
117601 TTTACTGTGT GGAATGAAAG CAATTAAGGA GCTGAATAAA AGAAATAATT  
117651 GCATGTGAGA ATGTGGACTT GGATGGGAAG ATGTTTAAAT GAGCTCTGAA  
117701 AGAAACAAGC TGCCAAGAGC AATTTTCTAA TTAAAGGGGA ATAAAAAGAT  
117751 TCAATCTCTA TTTCACTCTA ATCCAGAAAA CATGTCTTCA TGGAGAAGTG  
117801 CTCTTAAAT GGAATCATCA GCCAAAGTGG AAAAAACAAA AACAAAAAAA  
117851 CTGTTCAACA TGAGAAGGGA CCATTGGTAA ATGAGTCAAG ATGCTGTGAA  
117901 ACCAGTAGAC ATTTCTTTTG AATAAATGTA CTCTGCACC TTCAAGAACT  
117951 CTTACAGGAA GTGGTTGAAC AAACAGGCC AAAAGTTCAA AATAGTTCAA  
118001 GGTCAAAACA CTTGCCCTTT CTTCCCAGT CCCCAACATC TCACTGAGTG  
118051 TCTTGAGAAC TTCCTTGAT GCTATTTCTC AGGAGATGTT TAGGTCAGGT  
118101 TGTCACCCA GGTATAAAAG AGAAAGAGGA ACGCTTATCC CAGTCTGCAA  
118151 GGCACATCTT CATGGTCTGG TTATAAAGTG TTTAGTACTT CATAAAAAAG  
118201 GCACTAAAAA TATATATAAA CTCCCCATT CCAGAGTGA TTTGCTTTGT  
118251 ACCCACTGCC CATGCCATA ACTCTGAGCT GTATCCTTCC AGGGAATGGA  
118301 AAAGGTGTTA AAGCGAGTCT GATTTTGTTC TGTGTCAGAT GTGACAGACA  
118351 GGAAGCTGAC TATGGAAGAA GAGGAGGCCA AGAGGATAGC AGAGATGGGA  
118401 AAGCCAGTAT TGGGTGAACA CCCCAACTA GAAGTCATCA TTGAAGAGTC  
118451 CTATGAGTTC AAGGTCAGGC AAACAGTGAG GTCTAATGTA ATAATAAATA  
118501 AATTAAAGTG GGAGGCAGAA GACCTGGGGT GTTTTTTCC ACTTTCACTA  
118551 GTGAATATGT GAAGTTGAAA CTGAACAAAT CACTTACCCA CCCAGGTCT  
118601 CAGTTTCCCC ATTTGTAACA TGAACAAAT AGTGCTGACC ATTTGTATGC  
118651 TAGGAATATT GTTAGGAAAC ATAATATAGA ATGTGAAATA AGTGGACTAG  
118701 AAAGTCCTGA GATGTATTAT CATTATTGTT TAACTGTGTT TTAAAGCAA  
118751 AAATATTAAA ACTCACTACT ACAGGGCAAG ATATATTAACT ATCATTATTA  
118801 TTATTCATTA TTTGATTATT CTAATAGCC AATTTCAAAA GTCACAACCA  
118851 GGCCAGGCGC TGAGGGACTC ACGCCTGTAA TCTCAGCACT TTGAGAGGCC  
118901 GAGATGGAAG GGTCACTTAT ACCTAGGAAT TTGAGACCAG CCTGGGCAAC  
118951 ATAGGGAGAC TCCATCTCTA TAAAAAATAA AACAAAAATA AAATCAGCTC  
119001 AGTGTGGTTG TACATGCCTG TGGTCCCAGC TACTCAGGAG GCTGAGGTGG  
119051 GAGGATGGCT TGAGCCAGG AGGTTGAGGT TGCAATGAGC CATGATTGCA  
119101 CCACTGCACT CCAGCCTGGG TGACAAAGTG AGACCTGTC TCAACAAAAA  
119151 CAAAACAAAA AGATTACAAC CAAAAACAAA GGGAAATAGA AGGATTGCCT  
119201 CAAAAGAGAT CGCCCCAAGC CATTCCATGC GTAAGTCA GAACACCTTG  
119251 GAGACAGGCT ATCTTTTCACT CTTTGAAGA ACCAGACTCC TCATTGGTTC  
119301 TGAGCATTCT AACCTCATGG TTCCAAGTTT TTCTCTTCTT AACAGACTAC  
119351 GGTGGACAAA CTGATCAAGA AGACAAACCT GGCCTTGGTT GTGGGGACCC  
119401 ATTCCTGGAG GGACCACTT ATGGAGGCCA TCACCGTCAG TGCAGGTGAG  
119451 AAGTGTCTCA GGCTGGCCTT GCTGGGAGAA GCAGGCAACC TCTGAGAAGG  
119501 AAGCGTAAAG CCACGTAAAC AGCCTGCCAG TCCCTAGGAA GGCTTGTGTG  
119551 TTCAGTCTTC CCAGCTCTGG TCCTAGGTGC CTGCTTGGA AAGAATCATG  
119601 CGGTATCTGA AAAACATGGT TATCTCTGGT TTCAAATCGT TGTCTGCTG  
119651 TGTGAAGTGA AACAAATGTAC CCTCTCTGAC CTCAATGTCC TCTTTCCAAA  
119701 GGGGAAGTAT TGCTACCTTT CTCAGAAAAG TAGAAAGGTA CAGAGTCTTG  
119751 TATAAAATCC AAACCTCAATA AATCTCTGATT TCTGTCAATC TTTCTTTTCA  
119801 TGGGTTTGGT CCCGCTCTTC TGTAAATGT GGGACAATTC TGATTTAGAG  
119851 ATGTGGGAGT TAGGAGTTTA TAAAATGTGT TGCATTGACT CTCCAACAAA  
119901 ACACCTGGA TGATTCCATA CCCCTCCCTC GGCATTTACT GACAGGCTCC  
119951 CTCAGTAGTG ACCCAGCA CAGCCGGGAG TCCTAGCAGC CTGAGGGGAC  
120001 TGCTGGTTGG AACAGGGAGC GAAAAGGTCT CCCAACACC ATCACTATCA  
120051 CCTCTCAGCA CCACTGAGGC CTCCTGGCCT TGTCTTTTAT TGAGAGACTT  
120101 TGTGTCATA GCAACCCACA GGTCATATC CCAAGGCC CAGAGCCAGA  
120151 GCAAAAAGAC AGCCAGGAAG AGAGGTTTGC TGCTGCTGCT GCTGCTGCTA  
120201 CCCCACCTTT CTCATCACCT GCTTTAGATC TTTCTAGCTC CCCCTCTGAT  
120251 GACCTGAGCT TGCCCTCAA GACAATAAAC GGAATGTAGG CCACATCATC  
120301 TACCTGCTC CTTTTACAAA GGAGGGGACT GAGGTTGAGA AATAAGAGAT  
120351 GATTTACCCC AGCTTACAGA TTTCTTCAT GGCAAGCTG GAATGAGAAC  
120401 CCAAGTGTTT TGACTCCTGT TCTTTCAAAA CCCAGCTTCT ACCGGTTATG  
120451 CCAAAACATG ACAGAAGTTG CCGTTGGCAA GGCACAGGCA GGCCTCAGCA  
120501 TACCTCCCC TCCAGGGCTG CTGAGTGGGC AACTCTGCCC ACATTTCTCTG  
120551 GCAAGGACAA TCAAGGCCCA TCCTGCTTTT TCCCATGAGA TGTTTGGAGG  
120601 AGGGCACTGG CTCTGCAGTA TATCTCGTG ATCTGGAATG ACAGCCATCC  
120651 CTCAGGGGAC AGATAATGAC CAGAACCACA ATGGTTATTG CAGCAGTCAG

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120701 GTCAGAAAAA TTGAGAGGAG CCTGCTGGC ATCCAGTGAA GAGTGGCCAC  
120751 ACCGAACTGA TTTCACTTCT CTCCTTAGAC AACAAAATGC AGCCTGTGCA  
120801 TTCTCCTTTC TTTTTTTTTT TAATTATACT TTAAGTTCTG GGGTACATGT  
120851 GCAGAACATA GAGTTTTGTT ACATAGGTAT ACACGTGCCA TGGCGGTTTG  
120901 CTGCACCCAT CAACCCGTC TCTACATTAG GTATTTCTCC TAATGCTATC  
120951 CCTCCCCTAT CCTCACCCC TGACAGGCTC CAGTGTGTGA TGTTCCTCTC  
121001 CCTGTGTCCA TGTGTTCTCA TTGTTCAACT CCCACTTATG AGTGAGAACA  
121051 TGCAGTGTTC GGTGTTCTGT TCTGTGTGTA GTTTGCTGAG AATGATGGTT  
121101 TGCATCCTCC TTTCTTTCTG CTCCACTGTC TTGTCCTCT TAATCTCCTT  
121151 CTTTCTTCTC TTCTTTATTG CCTGGCCCTC TCTCTCCAC TCTACCTTGG  
121201 TGCCCTGCAT TCAAATTGAC CTATGAGGCA GCCCAAATTG TTTCCCCACT  
121251 ATTTTCTGGC ACGCTGGCCC TGGCCCCCAG CAGCTGCCCA GAAGACAGCT  
121301 GGAGTCCCTT TCTAGCGGAT GATGCCTGTG GTGCGGGTTG GGCTTGACTT  
121351 TCTCATGAAT GATTATCTGA CTTCTTACCC GTTCTCTTGC CTGTTTATCT  
121401 TGCCTTCAGC AGGGGATGAG GATGAGGATG AATCCGGGGA GGAGAGGCTG  
121451 CCCTCCTGCT TTGACTACGT CATGCACTTC CTGACTGTCT TCTGGAAGGT  
121501 GGTGTTTGCC TGTGTGCCCC CCACAGAGTA CTGCCACGGC TGGGCTGCT  
121551 TCGCCGCTCT CATCTCATC ATTGGCATGC TCACCGCCAT CATTGGGGAC  
121601 CTGGCCTCGC ACTTCGGCTG CACCATTGGT CTCAAAGATT CAGTCACAGC  
121651 TGTGTTTTTC GTGGCATTG GCACCTCTGT CCCAGGTGAG AGTGAGAGGT  
121701 GCTTGAATTT GCAAAGAGGA TTTTACCTGG TTCAAATGAC CCCTGGACTC  
121751 CATCTCATT TCTTCCACAC CATCTCAGAT CTGAACCTAA CAGAGCCTCT  
121801 GCCCTTAAAG TGCACAAAAG TCAATCAAAG AGATGAATAA TGACATTAGT  
121851 AATGACAGCT AATATTTCTT GAGCACTTTC AATGTGACAG ACACCATGTG  
121901 TGTTCAAGAA TTTACACATT TACATTTTCC CCCTGTAATG TTTCCCAAAG  
121951 CCCTATTAAA TAGGGTAAGT TATTATCCCC ACTTCACAGA CAAAGAAACT  
122001 GAGGCCACCA GAGGTTAAGC TACATGCCCA AGTAAGTGGT CCAATTTCTT  
122051 AACCTCCACA TTATGTGAGT AGACCACAAA CAGTGAAATT AAAAGAAATG  
122101 AGATATTGTT CTCCTTCTAT TTACCTCTGG CGATCTCTGA GAGGTTAAAG  
122151 ATTAGCCAGC TCAAAGATAT CAAAGGAGAA ATGCCACAT ACATTCTTGG  
122201 CCTCTCTAGC TTGGAAGGAC ACTGTGAGTA CAAAGTATCT CCTAGCAGGA  
122251 CAGCCAAAGG AAGTTCCACA GCTTTTATCT TTTTATAGGA TGAATTACAT  
122301 ACTCTTTCTT TTTCTTAGGA ACACCTCAGAG ACAACACAGAA AGGAGCGGAC  
122351 ATTCCTTTAC TCATTGAACA AATATTTACT GAGCACCTAT TATGCCCTGT  
122401 ACAGTATTGT GCTAGTTTTT GGGACTATAG TGAAGGCAA GATACACATG  
122451 CTTCTTCTC CACGTGGAGT TTATAATCTA CTGAAGGAGG CAACTCTCAA  
122501 CTACTGTAAT TAAAGTTATC TTGTTAAATC CTAGGAAGAA AAAAGAAAAG  
122551 TACTGCATAC GGAAGGAAGT TGGGCTGAA TGTAGGAGTT AGCAGGTAGA  
122601 CAGGGGCTGC ACTAGCCAG GTTCTTACT TAATTCAGTT AGGGGCTTTG  
122651 GGGCTCTGA ACTCTGAAC TCTGCCAGGG AGCTGGCATC CCAGTTGCCC  
122701 CAGAAAGAAA CAGAGCACAT CCTCCTGCAG GGAAGTTAGG CTGAATCTCA  
122751 TCAGACAGGA CTTTCTGGC TGGGCCAAGG GAAATCTTTC CTGTACCAAG  
122801 CAAACATAAT CTTCAAGAGA GTAGCTGAAT TCACATCAAA TTTAGGAAA  
122851 ACCTCTTTCC AAAACCCAG CGCAGGCCAG CGGTATTATT TGTCCATTAG  
122901 TGATGCAAGA GATTTAGCTA TCGTGAAAT GCATCAGAAG GTTGGAATTT  
122951 AGATGGATGA TCCCAGGAAG GCCTGTGGAT GAGATGCCCT GTGATCTCTG  
123001 TTCTCTAAGC CTTGGGGGAC CTGAACATATC AGAGGGGAGG GAGGAAATAT  
123051 GGGGAAAGC ATAGAGGTGG GAAGAAATAT CAGAGGATCA GAAGCAAAA  
123101 ACAACAATAA CAACAGAAAC AAAAAACAAAC AAACAAACAA AAAAAACAGG  
123151 CCATAGGCAA GAAAGGGTAA GAGGTTTTCT CTGGGAGATC TAAAAAAAT  
123201 GGCAATAATG AGGTAAGCCA GGCAGATACC TTTGGGCATC TCCAAGTCTT  
123251 TGCAATTGGC CAAGACAACA GCTAACAACA TTTGAGGCTT TAAGAAGGTT  
123301 ACCCTGTGAT CCACCTCATCT GATTTAGTGG CTTTGGCTGA AGCTCTTTGG  
123351 ATATAGTTGA AGGTACGGAA AGGGTCTTA CATGAGGACT TTAGGGTCAA  
123401 GTCTCTTGCT AACATCCTAT GTGACCTTGG GTAAATTCTT TGACCTTAT  
123451 TTTTCTTACC TGTAAAATAA AAGAATTGGG CTAGATGTCT CTGACAGTCC  
123501 TCCCTGTATC TACAATCTGT GCCAAGATCT AAAGTCAAAC ACCCTGCAAG  
123551 GCCCTGTGAT ACATATATAA ACCACAAAGA CAGAGCCCCG TCTTCCTTGA  
123601 GTCCACAGTT CACCCTGCAT GTCCCCATCA TGGTTCCCCA ACATGTCCTC  
123651 TGTCCCCAAA ATCCAGCACC TCACCCAGTG CTCAATCAGT AGGCATTGCT  
123701 CAATAACTGT TGGTGGTTCG TGAATAAATG CCCCATATGA CAGTTAAAT  
123751 CAGGCATCTA CTCCAAGCAG CTTCCCAGGG TGTCAGGTT CCCTGGGGAG  
123801 ATATTTAGGG ATGGCAAACT TCCCTTACTG AAAAAAGTAG CAAAGGAGAA  
123851 CAATAAGCCC ACTCAGTAAA TATCAGAACT GGAAAGCCCT TCAGAATCTT  
123901 TCAGATCACT GCAGATGAGG AATGGGAAGC CCAGACTAGG GATGTGACCT  
123951 ACCCAGGGCC ACACGGCTTG CTTGCGGCAG AACTAGGAGT TAGGAGTGGC  
124001 CCCCTAGGCC TTGTCTCTCA TTTCTGGGTT CAGCCACCA GCTCAAGCTG  
124051 CTTTTTGGGC ATACTGGAAG ACAAGCCCTG CACACCTTAG CCTCTACCA  
124101 GTTCCCATGT GTCTTTGTCC TTTTCCAGAT ACGTTTGCCA GCAAAGCTGC  
124151 TGCCCTCCAG GATGTATATG CAGACGCCCTC CATTGGCAAC GTGACGGGCA  
124201 GCAACGCCGT CAATGTCTTC CTGGGCATCG GCCTGGCCTG GTCCGTGGCC

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124251 GCCATCTACT GGGCTCTGCA GGGACAGGAG TTCCACGTGT CGGCCGGCAC  
124301 ACTGGCCTTC TCCGTCAACC TCTTACCAT CTTTGCATTT GTCTGCATCA  
124351 GCGTGCTCTT GTACCGAAGG CGGCCGCACC TGGGAGGGGA GCTTGGTGGC  
124401 CCCCCTGGCT GCAAGCTCGC CACAACATGG CTCTTTGTGA GCCTGTGGCT  
124451 CCTCTACATA CTCTTTGCCA CACTAGAGGC CTATTGCTAC ATCAAGGGGT  
124501 TCTAAGCCAC ACAACAGAGC CTCCAGCAGG GCAGGCCTAG GACTTCTCCT  
124551 AAGAGAAGGG CACTTCCCCA CCAGTGATCT CTCCCGACTG CACTGCCCTG  
124601 GAGAGGCAGC ATCAGGACCT AAGCCCCAGG AACTTCACCC AACTTAGGCC  
124651 CTGGCAATTA ACTGAAAGGG CAAAGTCTTA ATCAATCAAA CAATGGAGGA  
124701 ATCACCAGCT TTACACAGTA TTTAATTGAA TACAAACAAG CAACAGCAAC  
124751 AAATCCACCT CCACCCCATC TCCCCCTCAT ATCCCTGACC CAAAGCAAAG  
124801 GTCAGAGCCT TTCGCTCCT TCTATTCCAT CTTTGTATTA TTCCTTTGCG  
124851 TCTCATTTCT TTGGAAGCAG GGTTCCTCCT CTCTGCCCAA TTCCATATGT  
124901 CCCTATTATC TCACTCAGCT GACAAGACGT GAAAATGAGT CACATTCAATG  
124951 TGGCTGGGGT GGGGTCTTTT TTTCATTGTA ATCATTATTG TGGTTGCTTT  
125001 CGTTTTGCCG TTAGGTTTTG CTTATTATTT TGTTTTGTCT TTTTTTCTG  
125051 AAGTGAGTGA AAAAGGTGCC ACAAGGAAT TCCAGGTCCG AGCCAACAGA  
125101 GAGAAACATG AATTTTGA CACATGCTCT CTGCCACCT CTTGGCTCCA  
125151 TCAAGATCCA GTTCCCATC TCACTGTTTT CTCTGAGTTC TTGGGAGGAG  
125201 TGATGGTGTT GGGGTAGAAA TAAGCTCACT CACCCACGCA GGGTACTAAA  
125251 GATCTTACAG GAGCTTCAAC TGGAGCAGGA GGAGCTTTTT ATGCTTATGT  
125301 TGAATCAAGT CAGATACAAA AAGCAATTGT CCTCTTTGC CCAAGCCTT  
125351 CCAATTCTGT GTGTCTTGT GTGTCAGTGT CCACTTGTGT ATCCTTCTGC  
125401 AGGAAGACCC GCCAAATAGA AGAGATGGGA CAAAATAGG AATGGTGTGT  
125451 GACGACAAAG GGCTACTGGA AGAACAAAAG GGATACAGGC CTTCTTGATT  
125501 ATCTTTGGCT TTGTACCTGA GGCAGGAGAG AAGAGATGTC CAACCAAGTGA  
125551 GATCTTTAAG AGAAAAGTTT GTATTTTAAA TGTCAATGTG CCTGAGAAAT  
125601 GTCAGCTTCA CCACGCTCTT GCTTCCTAAT GCTCTATACA AAGAGGGCTG  
125651 ACTATATTTT TTGAAGTGGT GTAAAAACTT AGAGATTTTA TAAGAGAACC  
125701 AGGGGCTCCC TTCACCTCTC CTGGTCCCCTC AGGTCACATA TGAAAGCATT  
125751 TTTACAAAGT AGGAACTGGA ATTCTCATTT TCTCCCATGT TCCTGCTTGT  
125801 TCTTAACTT CATGAAGCTA TTTTCCAGC CTATGGGGTA GTTCTTGCTC  
125851 CAGTAAGAGG AATCTTAGTT GTCATAATCC CTTGGAGCCT GGGTTTTTGG  
125901 AGAAAGAGAT CTCCGTGCCC TACAGACCTT TTCTCAACGA ATGTGGGAAG  
125951 GACCTGGCTT TAAAACACGC ACACAAACAC ACAATAAAC AGACATAAGA  
126001 TGTCATCACG AAAGTCCCCA CGGATCTTTA GGCTTTCTGC ATTGACATAA  
126051 ATACATTTTC TAAGGGGGGG GGGGAAGAAA TAAAAAACA CCTGTTAATT  
126101 TTAACACAT TTTTAAAGAA AAAAATAATT AAAAAAGAAA CAGTGCTCAT  
126151 TGCATAAGCT ATGTTGACAG TTGCCAGTGG AAATGTTGGG TTGGTTCAAA  
126201 AAAAAAATAA AAGCTATACT ATATCTCTCT ACATACAGCT TGCTTCTACC  
126251 TGTGTTTCTT CAGTGAAAGG TCCAGGGGGC CACTGTGGGC TTCTTGTGAG  
126301 GAGACGTGAC TCAGGTGAAG GTGTCACCTC CTCTCACACT CAGGTGCCAA  
126351 TGTGTCAGAC CCAGTATATT CTAAGCAAAA ATACTTCAGG AAAATGCCAC  
126401 TTGTCAAAAC CTGGACTTTG CGAAGTTGGA AGATGTAAGT AGTAGTAAAA  
126451 GCTGTGGTAA TTAGGAGGA AGGAGGTTTC TGTATCAGAA AGGCATTGGC  
126501 CGTGACAGAC TC  
(SEQ ID NO:3)

#### FEATURES:

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Exon: 2010-3793  
Intron: 3794-109509  
Exon: 109510-109613  
Intron: 109614-118338  
Exon: 118339-118463  
Intron: 118464-119345  
Exon: 119346-119445  
Intron: 119446-121409  
Exon: 121410-121685  
Intron: 121686-124128  
Exon: 124129-124502  
Stop: 124503

#### SNPs:

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
378	C	T	Beyond ORF(5')			
742	T	-	Beyond ORF(5')			



88238	A	C	Intron
89219	A	G	Intron
89331	T	C	Intron
90794	A	G	Intron
92404	C	T	Intron
92672	A	C	Intron
92684	A	G	Intron
93132	G	C	Intron
93537	A	T	Intron
93557	T	C	Intron
95067	C	T	Intron
96000	T	C	Intron
96877	G	T	Intron
97271	A	C	Intron
97470	G	T	Intron
97518	G	A	Intron
98476	C	T	Intron
98779	C	T	Intron
99218	C	G	Intron
100538	C	A	Intron
101045	A	C	Intron
101232	C	G	Intron
101266	G	A	Intron
101290	A	G	Intron
101326	G	A	Intron
102342	C	A	Intron
104489	C	T	Intron
105266	A	G	Intron
105338	T	C	Intron
105570	C	A	Intron
105928	G	A	Intron
106459	G	C	Intron
107710	C	G	Intron
108062	G	A	Intron
108214	G	A	Intron
108364	C	A	Intron
108657	T	A	Intron
109746	C	T	Intron
111484	G	T	Intron
112879	A	G	Intron
113245	C	T	Intron
113265	T	C	Intron
113497	C	G	Intron
114486	G	T	Intron
114686	T	C	Intron
114817	C	A	Intron
115600	G	T	Intron
115668	A	C	Intron
115745	A	G	Intron
117230	A	C	Intron
118908	A	G	Intron
120430	C	A	Intron
120830	A	T	Intron
121926	T	C	Intron
122102	G	C	Intron
122950	T	C	Intron
123366	C	T	Intron
124947	C	T	Beyond ORF(3')
125010	A	G	Beyond ORF(3')
126043	T	C	Beyond ORF(3')
126064	-	G	Beyond ORF(3')
126283	C	G	Beyond ORF(3')

#### Context:

DNA  
Position

378 TGGCATGTACAAAGGTCCTGGGGTGGACAGTCACTGGTATAATCCAAGAGTGAACCTGA  
AGGCTATTGTTGTTGAAATGTAATAAGGGAGAGAGTGACGGGATGAAGGGGGATGAGTGG

FIGURE 3, page 38 of 61



GAAGCAGTGAATTCCTGCAAGGCTTTGAAGGTCATGGGAAAGAATTTGGTCTTTATATCA  
AGAGCAAGAGAAGACTACTAAAGGGCTTCAAACAGGGGAGCGATATGCTTAAGTCTGTTT  
GTTTGTTTTTTAAAAAAGATTACGGTGGCTATATGAGGAAAGTGAATTGAGAACTAG  
[C, T]  
GAGAGTTGGAGTGGTGGCTCCATTAGGAGGCTACTGAAGTAGATTTCATGAGGTAAGGAG  
TGATGGTGGCTGGGCTGGGATGATGGTGGTAGAAATGGAGAAAGAGTTGATAGGATTTA  
GTGATTGGATAAGGGACAGAAGAGAGATGAAGGCTTTGAGCTAACATCTGCTTTCTAAC  
ATGAGTAACCTGGGTGGCTGAAGATGCTATTTCTGAGCTGGGAAACAGGAGAAAAAGGAG  
CAAATATGGGGGATGAAGACTTTGAGTCTTTAAGGTGCTGTACAAACACAAATCAGCATT  
742 TGGTGGCCTGGGCTGGGATGATGGTGGTAGAAATGGAGAAAGAGTTGATAGGATTTAGTG  
ATTGGATAAGGGACAGAAGAGAGATGAAGGCTTTCAGACTAACATCTGCTTTCTAACATG  
AGTAACTGGGTGGCTGAAGATGCTATTTCTGAGCTGGGAAACAGGAGAAAAAGGAGCAA  
ATATGGGGGATGAAGACTTTGAGTCTTTAAGGTGCTGTACAAACACAAATCAGCATTCCT  
TTATTACTAAGGGTATCCACACAGTTGTAGCAGAGGGAGAAAGATCGCCCCCCCCCAC  
[T, -]  
TTTTTTTTTTTTTAGCTATTTCCATGGTATTTTCATTCTCATCCACCCAAATGAGGCAG  
TGAGTGGTAAGATGAGTATATAATAGTTTCAATTGCATTTTCATCCCATTTCTTCTGAGCTC  
AAGCTCACCTTTTAGTGGTTGAGGCCAGTAGATGAAGCTGCATATCACCCCAAAATCT  
TGTCTCTAGTTTAAACAAAACCTTATTTGAGAGACATTTGCATGTTTTATTAATATGATTT  
TTACCACCTTGTTCCTTCCATGTTTGGGTTTGAATTTGAGTGGCTGGCGGATGATCATC  
2005 TTTCCATCCCCAGTATTTCCAGCTATTTCAAGCCATTTTCAACGGAGTCTCCACCAGAT  
GGTTTGGAGGACAGAGCAGCTATTTGTGCCTCCCATTGACATCTATTTTCCAAGTGAGA  
GACTGCCCATATGTAGTGCAATATGTCACTGGAGGTGAAGCATCAGTTGTATTGGTGG  
GAACCTGCCGTTTGTCTGTCCCTTTTCTCATGCCTTTTCTGCCTCTCTGATCTTTTC  
TAGGTCCTGCGCTATCAGGAGGACAACCTGGTGTGCAATAGAAAGCCAGTGGCTAAGTCT  
[C, T]  
GTGTATGGCGTGGTTAAGGTTGCAGCCTCTCACCTCTGCCTTCTCCATTTTGGGCTGGT  
TACCTTTGTGCTCTTCTGAATGGTCTTCGAGCAGAGGCTGGTGGCTCAGGGGACGTGCC  
AAGCACAGGGCAGAAACAATGAGTCTGTTTCAGGGTCATCGGACTGCAAGGAGGGTGTCTAT  
CCTGCCAATCTGGTACCCGGAGAACCTTCCCTTGGGGACAAGATTGCCAGGGTCATTGT  
CTATTTTGTGGCCCTGATATACATGTTCTTGGGGTGTCCATCATTGCTGACCGCTTCAT  
2381 CCTGAATGGTCTTCGAGCAGAGGCTGGTGGCTCAGGGGACGTGCCAAGCACAGGGCAGAA  
CAATGAGTCTGTTCAGGGTCATCGGACTGCAAGGAGGGTGTCTATCTGCCAATCTGGTA  
CCCGGAGAACCTTCCCTTGGGGACAAAGATTGCCAGGGTCATTGCTATTTTGTGGCCCT  
GATATACATGTTCTTGGGGTGTCCATCATTGCTGACCGCTTCATGGCATCTATTGAAGT  
CATCACCTCTCAAGAGAGGGAGGTGACAATTAAGAAACCAATGGAGAAACACGACACAC  
[A, C]  
ACTATTCGGGTCTGGAATGAAACTGTCTCCAACCTGACCCTTATGGCCCTGGGTTCTCTCT  
GCTCCTGAGATACTCCTCTCTTAATTGAGGTGTGTGGTCATGGGTTTCATTGCTGGTGAT  
CTGGGACCTTCTACCATTTAGGGAGTGCAGCCTTCAACATGTTTCATCATCATTGGCATC  
TGTGCTACGTGATCCAGAGCGGAGAGACTCGCAAGATCAAGCATCTACGAGTCTTCTTC  
ATCACCGCTGCTTGGAGTATCTTTGCCTACATCTGGCTCTATATGATTCTGGCAGTCTTC  
5165 TTCTCTGAATGACTGAACATATCCACAAATAATAAGCGTGGCAGGAGATGGTGTGAAGA  
GTAAAAGAGCATATAGGAAGTTGTGTGTGGGGTGTCTGTTTCAAGAACCTGCTAATT  
ATACCTTCAGTAAGAAATGAAGCCATACAACCTCTAGAAGAGGAGGAGGAAGGAATCAT  
GGAAAAGTGGGGAGCCATAGAAGCTAGGGAGAGGTGTCCTAGGAGTGCTTCTGCCAGGT  
CCAGCCATGAGACAGAGCTCAAAAAGAGCTGGGCACTGCTGGTGACAGAACTGAGTGACC  
[C, T]  
GGGGGATCCTGCATCTGTTCTTACTCAATCCCTTCTTAATAATGTGACTTGGGGCAGGTC  
ATTTATTGGTTCTGGAACCTTAACCTTCTGATATGCAAACCTGGGAATAACAATACTTTCCT  
TGCCCTGGAGGCAAGGTCAGTCCCTTTTTCAGTTCCTTCCAGCTCTAAGATTTTCTGAACC  
ATAGACATAAGCACTCAGTGTAGGTGATATTCGCACTTGCCAAAATGGATCAGGGAATA  
TTGTCTCTGAAGGGAAATGGCCATTGACAAATTGATTTATTAGAGCTCTGTTTAGTCAT  
5402 GGTCCAGCCATGAGACAGAGCTCAAAAAGAGCTGGGCACTGCTGGTGACAGAACTGAGTG  
ACCCGGGGGATCCTGCATCTGTTCTTACTCAATCCCTTCTTAATAATGTGACTTGGGGCA  
GGTCATTTATTGGTCTGGAACCTTAACCTTCTGATATGCAAACCTGGGAATAACAATACTT  
TCCTTGCCCTGGAGGCAAGGTCAGTCCCTTTTTCAGTTCCTTCCAGCTCTAAGATTTTCTG  
AACCATAGACATAAGCACTCAGTGTAGGTGATATTCGCACTTGCCAAAATGGATCAGGG  
[A, G]  
ATATTGCTCTCCTGAAGGGAAATGGCCATTGACAAATTGATTTATTAGAGCTCTGTTTAGT  
CATTTTGTGGGAAGGATAATCATTTGTTAACGTAAGTAGAAACCTGTGCCCTTCTGGAGA  
ATACTATCCATTTATATGTAATCTGGGGAGAGTGTATACATACAATGAAGGACAGGG  
CTTCACTGGGAAAAACAACTCCATGGAATTTACATGATTATCGCGATGTCAGTGTGGAA  
GAAGATATGTAAGGCATTAAATGACATTAAGACCACAAAATTTGCCATAATTTGACGGA  
6794 CTCATAAAATATTAGAGCTAGAAAGGACCTTAGAATATCTTCTGCAGTCATGGTTCTTAA

FIGURE 3, page 39 of 61

ATTTTAATGTGTTGCTCAATCATCCAGGGATCTCACTGAAGGGCAGATTAGGATCCAGGA  
 GGCTAGGGGAGGATTGAGATTCCGCATTTCTAACAAGTTCTGGATGCTGCGGGCCCCA  
 ACTTAGAGGTGAAAGGTTCTGAAGCTCTTGACCAAACCAGGAGACCCAGCAAAGAAGTGG  
 TTTTTCAGACAACCTTGCTTAATTGAATAATGATTGTTTGCTCTTTAATTCCAACCTTCAA  
 [T, C]  
 GCCAATTTAGCAAGAACCAGAGGCTGTGCTAATTGCCACACCAGTCTGGAACCGGAAATG  
 GATAGCTTCAGGGTACTTGGACAAAGTTGGAACATCTGCTTTCTAATCTCTCCCTCTTTG  
 TATAGCTTTATTTGGCTACCAAGCCTGGTAGTATTGAAAATCTGCCCTCACTATACTCCC  
 CTAATATAATCAAGTTGAGGCCAGGCCTGTGCTCTATCAATAATATAGGATCCACGAAT  
 TCACATGTTTGGTTTATGCTTTACTTCTTCAAAGGTGCTTTTAGCAGCATGGAAGAATG

9883 GTCAAAGAATATGTCAAAGCATGACATATTCCAACCTCCAGGATCCATAAAACACCCCAAG  
 TTCTGTGGAGACCTTATCACATCTGCAAACTCTCCAGGAAGTCCAGAGCCCTCCTGGTT  
 AATTTGTTTTAGGACTAGGCATGCGGTATCCCTGACAACACTGGATCAGCAATTCTCC  
 TACCTAAGTCAGTCCCAACCATGTGCAGCAGAGTATCCAGTGCCCTGCCCTGGTCTGC  
 TCACATTGGTTTGTCTCCAGAATAATAATTCCTCAATATCCACAAGAGATTGATTCCAG  
 [A, G]  
 ACTACTCCGAGGATACCAAAAATCCTCAGATGCTCAAGTACCTGGTATAAAATGGCACAG  
 TATTTGGCATATGACCTAGGCATATTCTCTCCATATACTTTATTTATTTATTTATTTG  
 GGACAGAATCTCATTCTGTCGCCAGGCTGTCACTCGCTTATTGCAACCTCTGCCCTCCCA  
 GGTTCAAGCAATTTCTCTGCCCTCAGCCTCCTAAGTAGCTGGGACTACAGACGCATGTCAC  
 CACGCTGGCTACTTTTTGTATTTTAGTAGAGACAGAGTTTACCATGTTGGCCAGGCT

10210 CAGATGCTCAAGTACCTGGTATAAAATGGCACAGTATTTGGCATATGACCTAGGCATATT  
 CTCTCCCATATACTTTATTTATTTATTTATTTTCGGGACAGAATCTCATTCTGTCGCCAG  
 GCTGTCACTCGCTTATTGCAACCTCTGCCCTCCAGGTTCAAGCAATTCTCCTGCCCTCAGC  
 CTCTTAAGTAGCTGGGACTACAGACGCATGTCAACACGCTGGCTACTTTTTGTATTTT  
 AGTAGAGACAGAGTTTACCATGTTGGCCAGGCTGGTCTCAAACACCTGACCTCAAGTGA  
 [T, C]  
 CCGCCACCTTGGCTCCCAAAAAGCTGGGATTACAGGCGTGAGCTACCACGTCCAGCCC  
 CCCATATACTTTAAATCATCTCTAGATTACTTATAATACCTAATACAAATGTAATGTTAT  
 ATAGTTGTTTAAATGATTGCTTTTTTTATTTGTATTGTTTTTATTGCTGTATTATCCT  
 TTTTATGTTTTATTTTTTCAAATATTTTCTACCCGTGGCACCCACAGTTGGTTGGTGGA  
 ACCTGCGGTTGGTGAGCCCATGGATGTGAAGGCTGATAGTATGAGAAAACCTCAGAGGT

12220 ACATCCAAATAGTAACCTTAATATTCCAAATATGGCTGCAAAACAAATGTGCGATTATGGA  
 TGACTACTACTGCCATCTCTCCATACCAGTCCATCTTCTGCCAGGCTGTTTGGTCTTGAT  
 TTGTCGACCTTTTAGGTTTCTCCCATGTATTCCACATGACCTTCACCAACCCCACTTCT  
 ATCTCAAACGCTTTTCTGAGTTGTGGGATGTCAGATGTATTCTGCCACCATCACAAGGG  
 CTAACCGAGCCCTGGCTGCGGATCTTCATTGTTGTTACATTATTTCCATTCTTACACCC  
 [T, G]  
 ACTTCATGTTTGTACACTATTTTCTTACATTGCTGTCTCTTCTAAACATTCTTTGCTGC  
 ATCCACTTTTTCTCTATTTGTGCTCTAGGTGCTGCAGAGGCTAATGCTGGGTTTCTCTTC  
 ATTCTCCTTGCACCTCAGACCTCCCTTCTCAATTCCTTTTGCCATGTCTCCACTTTAAA  
 TCTTAACCTACTCCAGATAGTCTTTTCTTCACTATTTGGCATCTGTGCTTGGGTTGCT  
 TTCAGTCTATTCTCTGATCTATGATTCTTTGTCATGATCAAGAAGGTGCCATGAAAGGAT

13842 TCACCTTCAAAGCCTCTTTCTGGGTTTGGATTTCAGAGCAGCCTGTGCTGTAAAGCAAG  
 ACAGAAAGCTTCCCTGCCATTCATGCTGCCAGGATAGAATGACAGTACTCCTGAGGCT  
 CTCCCTCCCCACCCCTCCCTGCTGGACAGCTGATCTGCTGGACTCAGCCAGAGCCAGCA  
 GGCACCCCTCTTTATCTAGGAGCTGCAAACTTGATGCCTTTCCAGGAAATCCCCAGAA  
 GCTGGAGTATCCTCATCTACATGTGGCACAGTGTATGTTGTGTCAGGTGCTCATGTCCC  
 [G, A]  
 TTGCATAGGACTGGGGTGGAAAATAGGGACCGTCTTTTGTGTCAGCTCCAGTCAATGAG  
 TAGTGGCCATCCAGGGGCCATCTTGGAAAGGACTTGTGAGGCTGTATCTGCGCTCAGTT  
 GTAGATGTGAGAAGAAAAGGCCAAATATCTGCCAATCCTAGTCTGGGATTCAAGATAGA  
 AAGAACTGCATGGAGTGAAGAACTAGGAGTCTCCATTTCACTGAGATGCATAAGAATGA  
 AATTATTGTCATAATTCTTCAATACTGGGCCAATCCTAATAAGAAAACCCCTTTTGTAGT

14200 GAGTAGTGGCCATCCAGGGGGCCATCTTGGAAAGGACTTGTGAGGCTGTATCTGCGCTCA  
 GTTGTAGATGTGAGAAGAAAAGGCCAAATATCTGCCAATCCTAGTCTGGGATTCAAGAT  
 AGAAAGAAGTGCATGGAGTGAAGAACTAGGAGTCTCCATTTCACTGAGATGCATAAGAA  
 TGAATATTATGTCATAATTCTTCAATACTGGGCCAATCCTAATAAGAAAACCCCTTTTGT  
 AGTCTCTCTTTTCTTTATCTACATATAACACAGAAGCTTTTTCTATTCCCTGGATGAAC  
 [C, A]  
 CACAGGGACAGAAATCTTGTGGACAGGTGAAGCAGATAATTTCTTTATCAGACTAGAA  
 TCTTCCAGAAGCACTGCTAACCTAGTGAGTTTGTACTCTAGACAGGTGGTTCTCAAGCC  
 AGCTCCCCACCGCAGGCTTTTTCATGGTCTGCCCCCTCCCTGTGGAACCCATGTTTTAGG  
 TTATTAGCTGATAATTGGATTCTATTTTTTCTCATAAAATACAGCAAAAGATAGCTAGT  
 GATATTATGATGAGTTAATGTAATTATAGCCAAAGCAGAGAGAAACAACATTTTAATTAA

FIGURE 3, page 40 of 61

15878 TGTGTCAAATATCACTCTGTATCCATACATATGTATAATTATATGTGTCAACTAAAA  
TAAAGGAAAAAATCATTTCAGTGTATTTACAAAACATATGTAACCATTAAGAATAATG  
TTTTAAATTATATCTAAGGGTGTGATAAAATTACAGTATAAGATTGTGCTTGAAAAAGTG  
CAATAAGAAAGTAAATATGTACAGATGAGAAAAAGTGCAAAGAACTAAGTCCTAAGCAGAC  
TATACCTTTTCCACTGCATGGTACTTCTCTGGCCTTTTGCTTTGAAAGATTTTGCACCCA  
[G, T]  
CATGGCAAGTGTTAGCAGAGGCAGCCATTCTCACTTGTGCGTTGGCTTTGGGAGCCATA  
TATGTTGTTTCAGCTGGGTGTGGAGTGGAAAGGCTGCATGTTGATTAAATGCATTGTTAAG  
AACCTCTAAGAGTGATTTCTTTTGGGAAGTGAGACTGACGGTCCGAATGGTGGAAAGACA  
ACTTTTAATCTTTTACTTTACACTTTGTGCACCTTTAAATGTTTAAATGAGCATGCATT  
TCTTTAATAATAAAAAATACAAAAAATTTTAGCCCTAGATCTTCTGATTTTAACTGCAT

16030 ACAGTATAAGATTGTGCTTGAAAAAGTGCAATAAGAAGTAAATATGTACAGATGAGAAAA  
AGTGCAAAGAACTAAGTCCTAAGCAGACTATACCTTTTCTACTGCATGGTACTTCTCTGG  
CCTTTTGCTTTGAAAGATTTTGCACCCAGCATGGCAAGTGGTTAGCAGAGGCAGCCATTC  
TCACTTGTGCGTTGGCTTTGGGAGCCATATATGTTGTTTCAGCTGGGTGTGGAGTGGAAAG  
GCTGCATGTTGTATTAATGCATTGTTAAGAACCTCTAAGAGTGATTTCTTTTGGGAAGTG  
[A, G]  
GACTGACGGTCCGAATGGTGGAAAGACAACCTTTTAATCTTTTACTTTACACTTTGTGCAC  
TTTTAAATGTTTAAATGAGCATGCATTCTTTAATAATAAAAAATACAAAAAATTTTAG  
CCCTAGATCTTCTGATTTTAACTGCATATTCCTTTCTATTGTGTACATATTTTAGCATG  
AGAATAAGGTTATGAAGCTGGAAGTAGCAGGCTCCCTTTTCTCATATGTAGGAAGTTAA  
GAATGCATTCTACGTTTCTTCTTTAAGGAGTTGGCTTCTTCTTTTAAATAGGGGTAA

16292 TGTTAAGAACCTCTAAGAGTGATTTCTTTTGGGAAGTGAGACTGACGGTCCGAATGGTGG  
AAAGACAACCTTTTAATCTTTTACTTTACACTTTGTGCACTTTTAAATGTTTAAATGAGC  
ATGCATTTCTTTAATAATAAAAAATACAAAAAATTTTAGCCCTAGATCTTCTGATTTTAA  
ACTGCATATTTCTTCTATTGTGTACATATTTTAGCATGAGAATAAGGTTATGAAGCTGG  
AAGTAGCAGGCTCCCTTTTCTCATATGTAGGAAGTTAAGATGCATTCTACGTTTCTTC  
[T, C]  
TTAAGGAGTTGGCTTCTTTCTTTTAAATAGGGGTAACCTGGGCCAGGGAGTTTGGCAA  
GGGCCAAATAAAGTCTTAAATGCCAGCTCAGAAATCTGGATTACCATCCTTGACTGCT  
GGCTCCAACCCACCCCTCACCTGAGCTGGTCTGCAGAGGATTCCTGTTTGTGTCACTTCAT  
CACCAGCAACTACCGACAGATGATGCTTTGGCTGCTGCCTGGGTAAACAGGGCGAGGCTG  
GCTCAGGACCATGTTTTCAGATCAGGGGACCTCCTTTGATGCCATGTCCATGGTGTCCGA

16506 GCATGAGAATAAGGTTATGAAGCTGGAAGTAGCAGGCTCCCTTTTCTCATATGTAGGAA  
GTTAAGAATGCATTCTACGTTTCTTCTTTAAGGAGTTGGCTTCTTCTTTTAAATAGG  
GGTAAGTGGGCCAGGGAGTTTGGCAAGGGCCAAATAAAGTCCCTAATGCCAGCTCAGA  
AATCTGGATTACCATCCTTGACTGCTGGCTCCAACCCACCCCTCACCTGAGCTGGTCTGC  
AGAGGATTCTTGTGTTGTCACTTATCACCAGCAACTACCGACAGATGATGCTTTGGCC  
[T, G]  
GCTGCCTGGGTAAACAGGGCGAGGCTGGCTCAGGACCATGTTTTAGATCAGGGGACCTCC  
TTTGATGCCATGTCCATGTTGTCCGAGGGCAGCCAGGATCAAGGGCTAGACGGGGCAGTG  
ATGAGATGAGAGCAGGAGGGGCTCAGCTGCAGCCCCAGGAGAGCTATGCCAGCCCTGTT  
GACCAAGGAGGACAGAAGCAACAGGAGAGCGGAGGCAGAGGGGTGAGTGTCTATCGCTCA  
ATGTATAATCGGCAGACATTTGGGGAGCTCATACTGTGGGCTAAGCACAGGGGAGAAAGG

17953 GATTGGACGCAGTTCTGCACAGCACTTTTCCGAATGCCTCTGAAATGAGTCCCTCACTGAC  
AGAACGGGGCCACTCTGGGGGAAGTGAAGGCTCTCTTGGTCTGCACTGCTCTTTGCCAT  
ACAGATCTGTCTGCCAGGATTTTCTTGGGTGTGTAGGAGGCTGAGAGAGCTCCCTTT  
CTTCTCATGGCTAAATCCCTTGGTCTTTCCAGCCCTCCTGGGGGTAGAAGGGAGAGGGA  
AAAAAAAAGACTGAACCTTGTGTTGTTGTTTTGTTGTTGTTGTTGTTGCTGTTTT  
[C, A]  
TATGTTGTCTTGTGGGAGAGGGTATAAGATTGATTGACAGAGTGGCACACTTCCCCTGC  
AAATTCATCATTTGAATTTCTCAGGTAAGATGTTTACATTTCTCTGTTAAGATGCTCCAA  
TTTCTCTGTTTGAATTTCTCTGGTAAGATGCTCATGAATTGGTGGAGGTGTTGGCGGGA  
TGTGGGAAGTGTGCTGCTCTTCTGAGTTTGGGGGAAGTGGCTTAATTTCTCTGCATG  
ACTTTCTTTGCTCCTTTGGGCTTCATTTCTGTCAATGTAGTCTGACATGAATACTGCTC

23832 TAGGCAACAGCATTATAACTCCTGCCTTACAAAAGCTTATCTAACACACACATTTCCCTCC  
TCAGGCACATCCCAGCCTTCTTGCATTAGGATTAGCAGTATGCTTAAAGGGCCATTTTC  
AACAGCAAACTCATCAGCGCAAAACACAAACATGTGAAAAACGTAGCACTAAAGAGACTGC  
AAAAAGGACACTGGCTTACAGCATGGAAGCTGGAAGGAGAAGGCAGAGAATCACCTTGT  
CCACTTCAGCTATGAATATGCAGTCAAGGCCACCCAGTCATTCAAATTTTATAAATATACT  
[C, G]  
TAATATATATATAAATACCAGGCAGGGTATTTTTTTTCTCAAGTCATTTTTCTAATTTT  
TTTTAAATGAATAGATAGAAGAGCTGAAGTAAGGGTCAGGAGCAAGAGCTCTGCTTCTT  
TTCCCTTGTCTGGGCTTCGTTAGAGAGCCATCATCTCCTCAATATGTCTCCCAACTCTTCT  
AGGCATTGGATGAGTTTGTGTCAGATACGAAACCCAACTTTGCCAGTCACTTCACTAA  
CAGGTGAATGTAGTGAGGAGCCCTTTTGAAGACAGGGACTCAGCCCCCATTAGCCTCA

FIGURE 3, page 41 of 61

25001 GGGCAGATGAGTTTATACGTTTCTTTTCATGTCCCCTTCTCCCACATAGACTTTTATTTTCC  
 CCCAAGGAAAAACAGAAAAAATGATCTGTTTGACAGTGTTGCTATCATTGGGCATCAAA  
 CCTATCATCTAAGGGGAATCCCCCTGTATAATCAGTCAGCCAAATGGAGCAGGACCTGT  
 GTTTTGTAGCTGATACAACAGGGCAGCATCTCTAGTGAGGGGGCCAGGGCTTCTATTTCC  
 TTCATTAAAAATGAAACAGCAGACCTGATTCATATTTAGAGATTACACTTAGTTGCCA  
 [C, A]  
 TGTGGGTGTGCAGGCACCAACCAAAACCCAGTTGGCACCGTTGTCTTTTCTCTGCAATGAT  
 GTATTGAATTTAATAATGGAGGTATATGAAATTCAGAGTGATTGGAAGTGAAGGTTTAGG  
 GGCTTTGTGTAATAATGATATGTAAGGGATTTGGAAGTAGGTGAGGGATTCTTCCCAAT  
 ACTTATTCAATTTTGGAGTCAATAACCAAGCATTACAAATAGCCAAAAAGAAATTGA  
 AAGAGGGTTAATCCAATAAATTTTCATGCCTCATATGAACCACATCTTATAATAAGAAT

25141 CCCCTGTATAATCAGTCAGCCAAATGGAGCAGGACCCTGTGTTTGTAGCTGATACAACA  
 GGGCAGCATCTCTAGTGAGGGGGCCAGGGCTTCTATTTCTTTCATTAAAAATGAAACAG  
 CAGACCTGATTCCATATTTAGAGATTACACTTAGTTGCCACTGTGGGTGTGCAGGCACCA  
 ACCAACCAGTTGGCACCGTTGTCTTTTCTCTGCAATGATGTATTGAATTTAATAATGG  
 AGGTATATGAAATTCAGAGTGATTGGAAGTGAAGGTTTAGGGGCTTGTGTAAAAATTGAT  
 [A, G]  
 TGTAAGGGATTGGAAGTAGGTGAGGGATTCTTCCCCAATACTTATTCAATTTTGGAGTC  
 AAATAACCAAGCATTTACAAATAGCCAAAAAGAAATTGAAAGAGGGTTTAAATCCAATAA  
 ATTTTCATGCCTCATATGAACCACATCTTATAATAAGAATTATGCTTTTTCATTTCATAC  
 TCAGTTAAACAAATATGATTGTGAGCACCTGGTAAGTTCAGGGCACTAGGCTGAAAGGGG  
 TTACCAATGTCTTCAATTTAACAAAGTCCAGCTGAGCTCTTACAGGTACCAGAACTGTGC

25191 TGATACAACAGGGCAGCATCTCTAGTGAGGGGGCCAGGGCTTCTATTTCTTTCATTAAAA  
 AATGAAACAGCAGACCTGATTCCATATTTAGAGATTACACTTAGTTGCCACTGTGGGTGT  
 GCAGGCACCAACCAAAACCCAGTTGGCACCGTTGTCTTTTCTCTGCAATGATGTATTGAAT  
 TTAATAATGGAGGTATATGAAATTCAGAGTGATTGGAAGTGAAGGTTTAGGGGCTTGTG  
 TAAATTTGATATGTAAGGGATTGGAAGTAGGTGAGGGATTCTTCCCAATACTTATTCA  
 [A, G]  
 TTTTGGAGTCAAATAACCAAGCATTACAAATAGCCAAAAAGAAATTGAAAGAGGGTTT  
 AATCCAATAAATTTTCATGCCTCATATGAACCACATCTTATAATAAGAATTATGCTTTTT  
 CATTTTCATCTCAGTTAACAAATATGATTGTGAGCACCTGGTAAGTTCAGGGCACTAGG  
 CTGAAAGGGGTTACCAAAATGTCTTCATTAAACAAAGTCCAGCTGAGCTCTTACAGGTACC  
 AGAAGTGTGCCTGGGCTGTCTATGAAGATGAATGTAAGAGTGTGTGAGGCTTCAAGAG

26147 GCATGATCTCTGCTCATTGCAACCTCTGCCTCCAGGTTCAAGCGATTCTCCTGCCTCGGC  
 CTCTCTGAGTAGCTGGGATTACAGGCGTGTGCCACCATAACCCAGCTGATTTTGTATTCT  
 AGTAGAGATGGGGTTTGGCCCTGTTGGCCAAGCTGGTCTCAAACTCCTGACCTCAAGTGA  
 TCTACTCGCCTTGGCCTTCCAAAGTGCTGGGATTACAGGCATGAGCACTGTGCCTGGCCT  
 TTTTTTTTTTTTTTTTAAAAAAGGAGGTTTTCGTTAGTTTTTTT  
 [-, A, G]  
 TTTGTTTTTACTTCCATAAAAACCTCTTTGTGTACATGGAGGTGAATGGAAGAGAGGCT  
 GTGGCAACAGACGGGAGACTTTTCTGATATCAGAACCCAGTCCCATAGACCAGAATGTAT  
 GCTTTCAATCCACGTTGTCTGGGTCCATCCTATTGAGTGCCCTGCCCCACAGCGGGGTA  
 TGGAGAAGATCTAGACACAGCCCCAGTCTCAGTAGCTCACAATCCAGTGGAGGAGACG  
 GACTCAGAAACAGATAGAGATGAAGCCATGAGATCAGTACTGTCCGAGGCCATGGCCACG

27400 TAAACTTTACAAATCCTTAATTTGTAAATGTGGGCAATGATAGTACCTCCTCACAGGAT  
 TATTACGAGGTTTACACGGAATACTCTCAGCTCATAATAAGCACTTGACAGGCCTCATG  
 GGCTAGGCCCTCAAACTTAACGCATCTACAGGCAACAGCCATATGAAAGGAATTTTATA  
 CCACCAAGTCAAAAAATCTGTGAGCACTGCTCAGAAGCAAAAGCCTGTCTCCACAGCGC  
 TCATTTAAGGGGTGGGCGAGCTACAGAGAGAAGAATGAGCCCCACAGGGTAAGCTGGGG  
 [A, G]  
 AAGCTGGGGACAGAATGAGACTCAGGAAATCACTTGAATATTGATTATATTTGTGCTCAA  
 TAATAAAATAACGAATGAGTACAGCCCTAGACCTAAACATTGTGGGTGAGGCAAGGCA  
 ATGCGTTAATTTGCATCCACTGAGGAAAACTCTAAACCGTGACTTCTTTTTAAGGG  
 ACCAGAAGAATCTAGATTATATTTAGTCTAAGTCAATACATACGACAGAACCTTGCCCTC  
 TAGACTTGATAAGAAAGAAGTAAATAAGAGAAAGAATAAAAAACCTTCCACCAAAATA

27401 AAACCTTTACAAATCCTTAATTTGTAAATGTGGGCAATGATAGTACCTCCTCACAGGATT  
 ATTACGAGGTTTACACGGAATACTCTCAGCTCATAATAAGCACTTGACAGGCCTCATGG  
 GCTAGGCCCTCAAACTTAACGCATCTACAGGCAACAGCCATATGAAAGGAATTTTATAC  
 CACCAAGTCAAAAAATCTGTGAGCACTGCTCAGAAGCAAAAGCCTGTCTCCACAGCGCT  
 CATTTAAGGGGTGGGCGAGCTACAGAGAGAAGAATGAGCCCCACAGGGTAAGCTGGGGA  
 [A, T]  
 AGCTGGGGACAGAATGAGACTCAGGAAATCACTTGAATATTGATTATATTTGTGCTCAAT  
 AATAAAATAACGAATGAGTACAGCCCTAGACCTAAACATTGTGGGTGAGGCAAGGCAA  
 TGCGTTAATTTTGCATCCACTGAGGAAAACTCTAAACCGTGACTTCTTTTTAAGGGA  
 CCAGAAGAATCTAGATTATATTTAGTCTAAGTCAATACATACGACAGAACCTTGCCCTCT

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AGACTTGATAAGAAAGAAGTAAATAAGAGAAAGAATAAAAAACCCCTCCACCAAAATAC

29278 ATACACTTCAGCAAGTCACCTAACCTGCAAATTTCAAGCATGTGAATCTTGGATCTTTCA  
TGTGCTAGCTGTGAGACTTTGAGAAATGATTTAATGTCTCTTGGCTTCCTTTTCTACCC  
ACACAATGGGTATAATAATGTCTACCATATATCTTTGCAGCAAGGTCTAAATGGGGTGAT  
ACATGCTGAATACATTTCCAACAGAGTCTGTGCAATGATAAGCTCTTTCCAATGTAGT  
TAAAGCTAACCACTAACCCACCAACAAACCAACCTCTAGCCAGGACTGATGGAAGGAG  
[C, T]  
CTGTGAGAGAATGCATTTAAACACTTGGCACCATGCCTGACAAGTAAGTACTCGATA  
AATCAGTTATTTATTATTCGCATCGGTATTATGACCATTATCCTCTCTCTATAGGCTT  
CAGGTTTTCTGTCTTTTTATCACAGCAGTATCCAGCAGAAGCCTTTGATTTAACTAAG  
TCTCTACTGTGTGTGGCTAGATGCTATAAAGCATCCAGAGAAGTGAGAATTTGGTCCT  
GCTTTTAAAGTAGCTTATAGTCTAATTAGGGGGAAGTAATCAGATAGAAAGGAACTAACA

31437 ACTTGGCTTTGCCGGGTAAGAGGGGGCACTTCTCTCCTTTCCCTCATGAAAGGAGGGAG  
AGAAGCCAAAAATCTCCCTACTAGTCAACAACCTCAGGCACCCCTCCTCTCTCTCTATT  
TTATAGACTGGGAAGGGAGTGATGGTTGTTGGAGGTGGCAGAGCCAGTTCAGCTGCCTTT  
TGTGAAGTCTGAAGGAGGTGCTATCCTCAACTGCTGGCTTCTGCTCTTAAGCCTGGGG  
AGAATTAAAGTCTCTTTGCCTCAGTTTGGCACTCCAATTGCCAACATTGGGACAGCAGGA  
[A, G]  
AAGTTCATCCAACATCCCATTAAATATGTAATGTGTATTAGCACAGCGCTGGCACTGG  
GCAGGTATTTCTAAGTGATAGCCAATGCGAAGCCTACTTTATTATTTCCTCTTTGCTT  
AACCTACAAGGTGCTTAAGACCAATTTGTTTGTCCACACATAGTAAGATAAACAGCACTGA  
GACTGTGGTCTTTCTGCCCTGTGCTCTTATCCACCTGGGAATCTGGAAAGCCAAGCCT  
AGACACACTCGTTCACAAATGTTTACTGAAGCTTGTCTATTCAAAGCACTGTACAGCT

31857 TAACCTACAAGGTGTCTAAGACCATTGTTTGTCCACACATAGTAAGATAAACAGCACTG  
AGACTGTGGTCTTTCTGCCCTGTGCTCTTATCCACCTGGGAATCTGGAAAGCCAAGCC  
TAGACACACTCGTTCACAAATGTTTACTGAAGCTTGTCTATTCAAAGCACTGTACAGC  
TACAAAGACCATCTTTCTGAACCTCAAACCAGGCCACATGTTGGAATAACTTCAAGTA  
TGGAGACCAAGAGAAAAGGTGGTTGTTGTGCAAGCTCTGAGTCCACACCTTCCAGGA  
[A, G]  
CTTATAGTTGATGCAATGGTGGGAGAAGTCTGAACCTGGATTCAATCTGCTTGATTCCGA  
TGAATGGTGCAGTAGGCAGAGCCATGAGTTCAGAGCAGGAAGAAACCACTGGTTCAAAGA  
AGCATCTGTACATCGAAGCTGCTTTATAGTCTGTTGGGAAGCATGCATAAATTTATT  
CTTTCTTTCTTTCTTTGTTGTTCAACAAAGATTTCTTGAGTCCCTACTATGTGCCAGGTACT  
CTTCTAGGTACTGAAATGCAAGCAGTGAACAAAGAAGATACAATCCCTGCCAGCGGAGC

33155 ACAGTGTGAATTTTCAAAATTGCGAATTAGGAAATTGTTGCTCATTTTACAATTTGGT  
TTCCCTCAGGATTCCTTTTAAAGTAGCCAGCTACCCAGTACTTTTGAATATGACTTGCT  
TATAAAATTTGATAGGCTTGGCACGGTGGCTCACACCTGTAATCCACAGCACTTTGGGAG  
GCCGATGTGGGTGGATCACGAGGTCAAGACCAACATGGTGAACCCCTGTCC  
CTACTAAAAATACAAAACCTAGCCAGGCATGGTGGCACATGCCCTGTAATTCAGCTGCTC  
[G, A]  
GGAGGCCAGGCAGCTAGGCAGGAGAATCACTTGAACCCAGGAGATGGAGGTGTCAGTGAG  
CCAAGATCATGCCACTGCCTCCTGGGTGACAGAGCAAGACTTCATCTCAAAAAA  
AAAAAAGATATATAAACAAGTTTTTATAATATTCTCAATAGTACTAGTAAAAAAG  
CATGTGTTTTTAGGTCTTAGAGGCCCTGGTCCCAGTTTTATCTCTGACTCTAATGAGGTA  
TAGTATTACCTACATTGATTAGCCCTTCTATACTTCATAGGAGATGCTCCAAGACTGCTA

39487 CACTTGTCTCATCCCTTGGCCTTCTGCAGTCCAAGCTCCATTCTGAGATCATCCAAGGC  
TTCTCTTCTGTGTGATCCTTGGCCTTCTTGGAGTCTCTTTCTCCCATGTTCTCCACAAC  
AGAGCATTCTCCTGACTGTTTTTCAATCTGCATCTCACTCTTTCATCAGTATCTTTTCTC  
TACCATGCCCCATAAATTTGGGTGCTCCTGAGGGTCTGTCCTTGTCCCTGCTTTCTTG  
TTGTACAACCTCCTTGATCTACTTCACTCAAGTTTGGTCCCAATTTCTATATTGT  
[G, C]  
AAGATTCAAATCTGCATCTCTAGCCATATATCCATTGCTGCTAGGCATTTCTACCTGA  
ATATTTTATAGGCATGCCAGTGGCTCTTACTCTATGGCTCTTACTCTAAGTCTAGACTAC  
AGCAGAAAGCAATGCTCTTTTTTAAAGGCATAGTGCCTCTTTCAGAATAATTTACAGCA  
TACAACAGGCCCTGCTGTGCAGCATTACAATTTGTCATTAAACTCCATTCTCTTGCCA  
GAGTAAATGAGCCATTTACAGCCAGGGCGCCAAGATGGACTGTTGTTATTTTTTCTGCCT

41449 TCAGATTCAGGACACCAAGTTTTCTGTGGGAGCTTCCCTAGGAATATAACTAAGGAATT  
TAAATCAGGTTCAAGTCTGCTGTACACTCTCTTCTCCACTCAGGCATTGGGTGTGGC  
TTTTCCAAGCTTGAGAAGGGTGTGATCTGAGATGGGCTTGGGTATAGAGGGGAATTATAT  
TTAGGTCTACCTGTATAGGAAAAAGTGCCTTCCCAAGTCTCCCTGGCCTAAAGTATAA  
GAGATATGTGTTGGGATTTAGACCCAGAGCCCAAGCCAATAATGGGACCCCTTCTCACA  
[T, C]  
GTGGCTACCTCCTGCTATCACCACAACAGCTATCATACCCATAACTACAACAGAGGCCAA  
TTAACGTGGTGATAATTGACAAATGTCAAGACATCTACATTGAGGCACACTGTGCGTTT  
TGGCTGAGCTTTTAAATTGGTAGGGAAGGAAACTTTTATACCTACACCTATCATGGAAG

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GCAGAAGGTAAGAGCTAAAATAAAGGTATGCCAAGAACAAGGCAGGAAAGAAGGGTTTT  
AACAACTTGAGGCCTGATCCATTGATTAGTGAAGAGGAAACATGTTCAAAAACCACTCTA

42420 GGGTGACATGATAGATCTGTATTCTAGAAAAGTTAGTTTTGCAGCAGTTGTGTCCATTGA  
AAGGGACAGGATAAGGGAGATAGATAAGAAGACATGCTATGATGATAACTAGATTTGGAT  
ACCAAGTGGTATGGTGGAAAGGAATGAGAGAACAGGGTCACAGATGAATGACTGCCCAAT  
TTCAATCCATCATAACAGGATGTATAGGATTGCCCTTAAGTAAGATGGGGAATCCAAAA  
CGAGGAACAAGTTTSTAAGGTTTTTGGGGCCAATGATGAATTCATTGGGACATGTTGC  
[T, C]  
TTGGATATACCAATGGGACATTCATGTGAAAATGATCTCGGCAATCCTATCCTGGAATTC  
AGGATAGGATCAGAATGAGGGACACAGTTTATAAGGTAAACAGAATGGAGGTGATATAGA  
AGATAAGGGCATAGATGAGCTTACCAAAGGGGAGAGTTTAGAATGAAAAGAAAAGACCAA  
AGGCTAAGCCTGTGCTATTCTTTCTCCTCACAATACGCTTCAGACCTGGGCACAAACCAT  
CAGTGAGTGTATGATAACACTACTGTGGGCAAAATCCCCCTCTATAAGGGCCTGATTTCT

43256 AGAAAAACAATTAGAAATGGAGAGCTAACTCTTTGGAAATGGTCAAAGAACACGGGTCTAC  
AAAACCGTCAATAAAGCGCTAAGATGCCTGGGCGGGGTCAAAAAGTCTACCTGGGCGGGG  
TCAAAAAGTCTACCTGCTCAGCATATGGGGCCACAGACATCTGACCTTTACCAACTCCACA  
ATAACCACTTCATCTATGGATCCAGTCTTGGTATCACCTAGTCGCTGTTTTCAAGTAACA  
GAATATTTGGTTCTCAATGGTAGGTGACTGGAATACAGCTTACTTTCTCCACCCCTTACC  
[G, C]  
CCAATCCTTTCTGCCCTTTATAGTTTAAATTTGCTTGTAATTTACTTGGGAATACATTTG  
GGAGCCATTATAGGGAATAGAAAGGCAGACATGATGAACAGAATGCAGGGTGTTTTTTAT  
TACTTCACATTGTGCTCAACAATTAGGAGGAATCTAGAAGCCCTCCCACTGGCCAGGA  
ATTGGTCATAGCATGAATAAACTCAATATAGGTTGAGTATTCCTTACCCAAAATGCTTGA  
TACCAGAAGTGTTTTTGGATTTTGGATTTTTTTTTTGAATATTTGCATTATATACTTACC

43967 GGGTTTTGGGATTAGGGATACTCAACCAGTGGTAGGTTTGGGATGATATCAGCATGCTAA  
GGTCAAAGAGACCTAGCTGGGAAGGGTGGGAGGAACATGGAATTTTCATTCTCTGGGCAC  
CCCTTGAACAGTCTTACTATTAGGGCCCCAAATTTGTTCTAAGTGTGTGTGTGTGTGTGT  
GTGTGTGTGTGAGAGAGAGAGAGAGAGAGAGAGAGAATTTCTTCTTCTTTATATTCT  
AAGTTCCTCAGGACAAAATTTTGGGTTTCTTTGTATTCTCCTGCAGCTCCTCATGTAGT  
[T, C]  
CTAAGCAAATAAAGGAATTCATTAGGTCTTGAATTTAGAAGCCTCCCACTTCTCTATGT  
AGGAGGAATCTTAGGGTGGCAAGATAAGTTGAGGACTTTCTTCAAGCACATTTACAAA  
GTAAGAGAAAATGTTGACTGTGTATATCTAAGAATGGGTGGGCTCAATGATCCCCCT  
AAGTTACTCTTTACTATTATTGATTGATTGATTGATTGATTGAAGAAGCAATGTTTTGAT  
TGATTGAAGAAGTAATGTTTCCAATGGCTACAGCAGACTGGAGCAAAAGAACAAAATGAA

48604 TTTTGGCTCTATCCTGGCTTCTTACACAGGGGTGTCCAGTCATCTCATCTGGTGGGAC  
AGGGATAGAGCTGTGGCAGTGGAGATGAGGAAGCTCGCCTCCTAAGTGAGTCTGAATTC  
TAAATATGGAGCCACTCCATAATCATTGGAGTGAATATTGGGCCATGGCCCTTTTCTT  
GCCAGCTGAGCTATGAAAAAGGATGTCTTAAGACCAGAGCTGTGGGACCATTTCCAGC  
CCCTGCAGGAATCAAAGGAGCTGACAGAATTGTTTGTGTTTTTTTACAAAATGAAAA  
[-, A]  
AAAAATGTAAAATTTTTGAAAAGAAAGCCTCATTGAAAAGAAATCCCTCTCCCCAGCTGG  
GCTCCCAGGCAGCCTCCTGCAGAACATCCTTAGCATTGCAGAGTTGTTCCCATTGGCAACC  
GAGTAAGGGGCTTTTTGTTTTCTTAGAAGATTGAATCCTTTCAACCAGAAGGTAACCAC  
TGGTTCCTTCCCACAATCCCACTCCAAACCCCTACCCTTATTGACTACATGACTAGT  
TTTGCATTATGGATTTTTTATGCCAATTGAAAAGGCTAAATATACAGAACTGAGG

49560 TGAGGGGTTATGAGACCATAGGCTCATTTTGGGGGGGGTCTAAAATGCAGTATTTTTGA  
ACTGATATGGGGAAAAAAGACATTTCTGAATTGTTGTGATGTTGCAGATTCTGGGCCGT  
TCCAGCATAAGCACCTTTCTTAGAGTACTTGGCTTTGTGAAGTAGTCTTATCCCCCTCT  
TCCACTATTTTACATCAAGTTAAAATAGAGGAAGATGCCTAGAAATGGCCGTATAGACAG  
AGAAAACCTGCACTAAAACCTCCCTCCGTATGCCTGACTCCTCTAGACTATGACCATCG  
[A, T]  
GGGGCCAGAAATCATATCTTAAAGATCACTGTGCCTCCAGTACCCAGCACGGTGTTTAAT  
AAATGTTTGTGTAATGAACGAACCTAGTAAAATTTTCAAATCATTAGAGCTGAAGTATCCT  
TTAAGATTCTTTAGTCCCTCATTTTACAGATAAGGAAGCTAAGGCTCAAGACATTGTGTG  
GCTTGGCCAAAGGCACACAGCAAGCTAAAGGCAGAGGGAGGACAGGACCCGGCTGTCTCA  
ACCCCTGGCTGTACTTCTGCAGCATTCTAATTCTTTTACCATTCTTGCAGGGA

52729 CCAATGGGGAAGCACCAGGGTCAGCCGCAAGGCAGAAGGAGCAAGAGGAAAAACATGGACA  
AGAGGCTCTACTGTGGATTCACTGGCAAGAAATGGGAGGGGCAGAGTAAGCAGGTTTAGG  
ATTATCGGGTTTGAATGACTTGATTGAGCTGTAGGGTGTAGAGACTGCCTCTACTGTCTG  
GCACCAGGGTAATTAGGCCAGCTGGATAGTGGTCTGGAGTGTGAGAGCTCCCTAAAGGA  
GGTGGTTGGAGGTGTAGGTTTTGGATTGGTTGATCTGTATATGAAGGTGCACGTGCAGG  
[G, T]  
TGAGTCTCTACTATCACTAGAAATGGCTGGTCCCAGGAGAAGTAGTCTCTCTAGAGAC  
AGCAATGCCCCAGATGTCAAAGCATCAGAAAATACAGAAAAAAATTAAGCATGATTA

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ATTCATACTCACAGGTCTAGTTTTGTGTAGTTAAGAGCAACCTAAAGAAGTTGATAACT  
CGTGTTCAGGTCAGGTTTCCAGAAATCATATTCTCAGATGAAGATTTGCATGAAGGAG  
GTTTAATGCTCAAACCTAAGCCCTAAGGCTCCATACCTGTGGAGGAAGTGAAGAAGCCCA

55031 TAGTGAGGCACACTTACTTCTTAATTTGTGCCACCCACTTTTCAGGCTCCCTTAGGACAG  
CCTCCACCTGCTCCTACTGTGCTTCCATCGTCCCTCTCCTCAGGCACAGGCTGAGGAGT  
AATAAGAGCACCTGATATGTGTCAGGCCTTACTGTGTGCTAGGAATTGTGCTAAGTACTT  
CCTATGAATTTTCCATTATTTCTTTATAATAACTTTGTAAAGTTAGAGCCATTATTCAG  
AAGGGAACCCGAGGCAATGGGAGTCAAAGCAAAGAATTTGGGCTTTTAACCATTACACT  
[A, G]  
TTTTGCACAAGTAGCCAGTAATGAAAAGGCTGCTATCCGGAATCATCTTTGCAAAAGGTA  
ATTTCTTTAGCACTTTATCAGAAGAAGGGGCTCCTTCTCAAATTTCTGAGGGAAGAGAA  
GTGGGGAAGAAAAGATGACTGAATCCAAAGCTCGGGCAGGGAAGCACATCGAGTGCCAA  
GTGCGCTGCGCTGGGCTTAGTCTGACTCAGCCGCCATCTTCCCAAGTGCTTCTGGAA  
TTCTCTCCTCTCGTGGGCTCAGCTCCTTCATCTTAGGAAAGAAGGTAAGATCTACA

55066 CACTTTTCAGGCTCCCTTAGGACAGCCTCCACCTGCTCCTACTGTGCTTCCCATCGTCCC  
TCTCCTCAGGCACAGGCTGAGGAGTAATAAGAGCACCTGATATGTGTCAGGCCTTACTGT  
GTGCTAGGAATTGTGCTAAGTACTTCTTATGAATTTTCCATTATTTCTTTATAATAACTT  
TGTAAGTTAGAGCCATTATTCAGAAGGGAACCCAGGCAATGGGAGTCAAAGCAAAG  
AATTTGGGCTTTTAACCATTACACTATTTTGACAAGTAGCCAGTAATGAAAAGGCTGCT  
[A, C]  
TCCGGAATCATCTTTGCAAAAGGTAATTTCTTTAGCACTTTATCAGAAGAAGGGGCTCC  
TTCTCAAATTTCTGAGGGAAGAGAAGTGGGGAAGAAAAGATGACTGAATCCAAAGCTCGG  
GCAGGGAAGACACATCGAGTGCCAAGTGCCTGCGCTGGGGTCTAGTCTGACTCAGCCG  
CCATCTTCCCAAGTGCTTCTGGAATTTCTCCTCTCGTGGGCTCAGCTCCTTCATCT  
TAGGAAAGAAGGTAAGATCTACAGACAAATGATCTTTAAGTATCCTTAGAGCACTAC

56912 TGAAATACTTTAAACTTTGTAGCTTCTTCAGCACAGAAGTGCGCTCTCTGAACCAATTTT  
AAGCAATCCTGGCTCTATCTGTGCATGTTGATTTAGCCTGTGGTTATAGTGTTACAATT  
TAGTGATTCACCTCATTTTAACTCTCTTTCCCTTTAGCAGGATCATTTTCTCTGTGTT  
AAGGGATCAACATTGAGGTAAGAATGGCTAAATAATAGCATCTTCTGGAATACAAATGAC  
TTTATAAATAAAAGAAGATAAAAGGAAGAAGTAGGATGATTTCTCAGCTCTAATACACTT  
[A, G]  
GCAAAATGCCATATGCTTTCTCCTGCGTGTACTGGTCAGGCCAGTTCTAGATACAATCATG  
CGCTGCATAATGATGTTTTGGTCAACAGTGGATTGCATATGTGACGGTAGTCTTTAAGA  
TTATAATACCATATTTTGTGTGCTTTTCTAGGCTAGATATGTTTAGATACACACAT  
ACTTACCATTGTGTTCCAATTGCCTACAGTTTCCAGTACAGTAACCTGTTGTACAGGTTT  
GTAACCTAGGAGCAATAGGCTATACCATACAGCCTAGGTGTGTAGTAGGCTATACCATT

58480 ACTGTCCTTCTGTGTCTGAGGGAAGGCATGTAACCTCTGCTTATCTTCACCTGTGCTCT  
AGATCCTGACCTTCTCTGGCAACCTCAGGGACCTTGCACCATCCATTCTTCTCGCCTAAT  
GGCGAGACTCAGTCTCTCCTCTCCTTTCCACTCTCCTTGCCATTCTTAGTATCTTTT  
TACAAGCAGGTCTTCCAAAGTACTGCTTGAGGTCTGAGTTGGAGGGAACATGCCTCTACC  
CTACTAAAAGAGAAATTCCTCTGCAGAAGACCCAAGCTGACTGACAAATCCCTTTACTG  
[C, T]  
AACTGCAGCTCTAGCTCCCAACATTTTCTGTACTTACTCTCCTGCTCAGGTTCCCTGGC  
ATTGCTGATGTCTTTCAGCCTTTGTGCCCTGGCCCTTTCTCCTCTCCCTCATCTAGC  
ACTACCTGTCAAATCAGGCACTTACTTTAAATTTATCCCAAATTATCATTGCCATCAT  
CTCCACTGTCACTTATCATATGTTTGAATAGCGTTTCCATTTCCCAAATGTTTTCGCAT  
GCATTTCTCAATTGAGCCTTACGAATCCTAGAGCTGAGAAGGTAACAATTTATGAGTC

61128 ATACAAAATTAGCCAGTTTGGTGGCATGCACCTGTAGTCTCAGCTCCTTGGGAGGCTGA  
GGCAGGAGAATTGCTTGAACATAGGAGGTGGAGGTTGCAGTGAAGTGAAGTACGCCACT  
GCATCCAGACTGGGAAACAGAGTGAGACTCTGTTTTATATATATATATATACACACA  
CGTACATATACATGTATATATATACACATTATTATTGAAAGCAGCCAAAGAAAATAACA  
CATTATATATAGAGAAAGACAAATGATGAGTGACTTTATATGTATATATATGTGTGT  
[G, A]  
TATATATATAATGTGTATATATATACATATATATATATAGGTTAAGAACCTTCAGCACAT  
GTATACCTATGTAAACAAACCTGCATGTTTCAACATGTATCCCAGAACTTAAAGTGA  
AAAAAAGAAACCTTCTGCATGCCAGTAACTGTGCTAAGTGATTAGGATGCAATGGTA  
ATAAAGCAAGTCCCTCTCCTTAAAGAATTTCTATTAGAAAGGGAAGTGGTAAATA  
AAAAATAAATATATAAATTACAATTTGTGAAAAGTGCTACACATGAAAGAGTGCTGAGAC

61320 TGTATATATATACACATTATTATTGAAAGCAGCCAAAGAAAAATAACACATTATATATAG  
AGAAAGAGCAAATGATGAGTGACTTTATATGTATATATATGTGTGTGTATATATATAA  
TGTGTATATATATACATATATATATATAGGTTAAGAACCTTCAGCACATGTATACCTATG  
TAACAAACCTGCATGTTTCAACATGTATCCCAGAACTTAAAGTGAAGAAAAAAG  
AACCTTCTGCATGCCAGTAACTGTGCTAAGTGATTAGGATGCAATGGTAATAAAACAAA  
[G, A]  
TCCCTCTCCTTAAAGAATTTCTATTTAGAAGGGAAGTGGTAAATAAAAAATAAATAT

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ATAAATTACAATTTGTGAAAAGTGTCTACACATGAAAGAGTGTGAGACAGACATCAATGG  
ATAAACCTTAGATTGAGAAGGGCTCTGACAAAGCAACATTTAAGGTGCAACCTGAGAGAA  
TAGAAGTTAAACAGGCAGATATTGGTGAAAGAGCAGTCTAGGCAGAGGGAACATCATTTG  
CAAAGGCCCAGGGTAAGAAGATCCTGGTAAGGAAATGACAGTGGAGAAGGTTAGTGTA

61444 TATATATATACATATATATATATAGGTTAAGAACCCTCAGCACATGTATACCTATGTAAC  
AAACCTGCATGTTTCAGCACATGTATCCCAGAACTTAAAGTGAACCTGAGAGAATAGA  
TTCTGCATGCCAGTAACCTGTGCTAAGTGATTAGGATGCAATGGTAATAAAACAAAGTCC  
CTCTCCTTAAAGAAATTTCTATTTAGAAGGGAAAACCTGGTAAATAAAAAATAATATATA  
AATTACAATTTGTGAAAAGTGTCTACACATGAAAGAGTGTCTGAGACAGACATCAATGGATA  
[A, C]  
ACTTTAGATTGAGAAGGGCTCTGACAAAGCAACATTTAAGGTGCAACCTGAGAGAATAGA  
AGTTAAACAGGCAGATATTGGTGAAAGAGCAGTCTAGGCAGAGGGAACATCATTTGCAAA  
GGCCAGGGTAAGAAGATCCTGGTAAGGAAATGACAGTGGAGAAGGTTAGTGAGCAG  
GACTGTGGCTAGGGCGGAGAGGCAGGGAAAGTGTGTTAGAATTTCAATGCAATAGGAAATA  
TGGAAGATTGAAGGCAGTTTGCATTATAAAATAATATGATTGCTATTTTAAAGCTACTT

62641 CCAGGCTGTACCAGGCCTCAGATATGACAGTGAATGAGATAGGCAACATCTTTGCCATT  
GGAGAGCCTTACCTGAAGTGGACATGAGGGAGTTGAAAGCAACTCTTATAGGAAATCATG  
GTAAAGACGTCCAAGAGAAGAAAGATGAAGGGCAACACATGCACGGATGCCAAACATCT  
ATCAGAGAGAAAGGAATTTTTCAGACCTGACCTGAATGATGAAAGGAGGTTTTTGGAAAGG  
AAAATAGAAGGGAAGGACAAGGAAATATCTGGGCAGCAATATTTATCTGCTGTGGTGC  
[T, C]  
TCACTCTCTCTCTAATCCTTTTCCACCCAGCCCCAAATTTGAAAGGATTGCAGGGAGCT  
CCTGCTGGAGTCATTTCTGGTATTAATAATGTACAGAAAGGAAAGCTTTGGTCTGAGTT  
TGCAGGCTTCCCTGTCTTTCATTTCTATTGTAGAAAGCAGCTTATATAAAAGATGTGCT  
GTGTGGCCCTTTGAGCTGCTGTGATTGTGTTAGGACCCCACTGGATGGTATTCGCATGAA  
TTAATCTACTGTAGCATCTCTACAAATCAAGAGGCTGGCTTCTGTTGAAATGTCCCAAG

63023 ATTAATAATGTACAGAAAGGAAAGCTTTGGTTCTGAGTTTGCAGGCTTCCCTGTCTTTCA  
TTCTTATTGTAGAAAGCAGCTTATATAAAAGATGTGCTGTGTGGCCCTTTGAGCTGCTG  
TGATTGTGTTAGGACCCCACTGGATGGTATTCGCATGAATTAATCTACTGTAGCATCTCT  
ACAAATCAAGAGGCTGGCTTCTGTTTGAATGTCCCAAGGCTTTGTGCACAGGGCAAGCT  
AAATGTCTCCCTACAGTGAAGTGAATGCTTGGTGCCCTTGTGCATAGGATCTGAT  
[A, G]  
TATAGATGCATGTCTACAATTGCACAGTGGCTGCTGGCAACATTTATTACAATCTGAATG  
TGAAATGGCTATTCTGTTCAAGGATTCGTATAAAAGTATCAGCCACAGTAGATGTATAA  
GGAGCCTGGTTTCACTGCAACTGACTACAGTTATCTGATTTTTTTTTCTAGTTTCATTTT  
TAGTCTGTGGAGCAACAGAGATTTCCTCCCAATGATGTCTTTTCTCAGTCACCAGGG  
TGTGGTTATTTGGTTTTATGTAGAGGAGATAGAAACCAATCAGTCTAAATCATATTCTGT

63051 GGTCTGAGTTTGCAGGCTTCCCTGTCTTTCTATTCTATTGTAGAAAGCAGCTTATATAA  
AAAGATGTGCTGTGTGGCCCTTTGAGCTGCTGTGATTGTGTTAGGACCCCACTGGATGGT  
ATTTCGCATGAATTAATCTACTGTAGCATCTCTACAAATCAAGAGGCTGGCTTCTGTTTGA  
AATGTTCCCAAGGCTTTGTGCACAGGGCAAGCTAAATGTCTCCCTACAGTGAAGTGAATA  
TGCTTTGGGTGCCCTTGTGCATAGGATCTGATATATAGATGCATGTCTACAATTGCACAG  
[T, C]  
GGCTGCTGGCAACATTTATTACAATCTGAATGTGAAATGGCTATTCTGTTCAAGGATTCT  
GATAAAAGTATCAGCCACAGTAGATGTATAAGGAGCCTGGTTTCACTGCAACTGACTAC  
AGTTATCTGATTTTTTTTTCTAGTTTCATTTTGTCTGTGGAGCAACAGAGATTTCTT  
CCTCAATATGATGTCTTTCTCAGTCACCAGGGTGTGGTTATTGGTTTATGTAGAGGAG  
ATAGAAACCAATCAGTCTAAATCATATTCTGTTGAAATCAGAACCAAGGATCCACAATC

64989 GGTTTAAGAAAGCAAGGTCAGGTAAGCTTCACAAAGTAAGTCAAGAAGTATTTTACCTT  
TATCTTCTGAAAGAAATTTATGCAACGTTGAAATTAATTTGTTTCAGAGATGGTCAACAGAA  
TATACCAGAGAAACTATTTGGACTTAGAGCTTCTTGGGGGAAGGTTTTTGATAAATAAT  
GCAATTTCTTTAATACATAGTACTTATATTTTCTATCTTACCTTGTGACAATCTGATGA  
ATTGTGTTTTTCAAGAAGTTTGCCCATGTCATCTGAGTTGTTAACTTACTACAACAAAG  
[T, G]  
CTTTGATAATATTTCTATATTAGCCTTTGAATGTCTATAAGATCTGTCTGATGTTCCCT  
CTCTCACTTTTTTAAAGAAGTCTGTCTAGAGGTTTACCAATTTATTTTGTGTTTATTTTA  
TTTTATTTTTTCTTATTTGAGACAGAGTCTCGCTTTGTGCGCCAGGTTGGAGTGCAGTGG  
CTCGATCTCGGCTCACTGCAAGCTCTGCCTCCAGGTTACGCCATTCTCCTGCCTCAGC  
CTCCCGAGCAGCTGGGACTACAGGCACCAGCCACCATGCCCCGCTAATTTTTTGTATTTT

65929 TTAACCTTACACATTTCCCTTTAAGCACTGCCTTAGCTGTATCTCACAAATTTTGATATT  
GTCTTTTCTATTGTCTTTTATTTCAATATATTCTAATTTTCTTGTGATTCTTCTTTGGCC  
CATAGGCTGTTTGAATAATGTAGTTAGTTTCCAAATATTCGAAGACTTTCACAGATACC  
TTACTATTATTGATTCTAATTTAATTTCTGCTACAATCCAAGTATATACATTATAAAGTT  
TCAGCCTTTTGAATGTATTAAGAATATTACCAGAGATAAGAAGATAAGAATATTACCAG  
[C, A]

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GATAAGTAGGGATATTTTCATAAATAATAGACGAATTGATTCATCAAGAATATACAACAAT  
CATAAATGTTGATGTGCTAATAACAGAGTCTCAAATTTATATGAAACAAAACGACAGAA  
CTAAAGAGAGAAATGGCCAATCCCACAATCTTTATCTTTATCAGGTGATTTATCTTGGTG  
AACATTCCCTGTGCTCTTGAAAGAAAGTGTATTCTGTAGTCATTGGGTATAAATCTTA  
TATATGACAATGAGGTGATTGATAAAATTATTTAGATTGTCTATATCCTAAGTTTTGTAG

66694 TCCGTTATTATTTATGCAATGTCCCTATTTATCTCTGGTCATATTCTTTATCTTGAAGTC  
TTTTTAACGTATGAATGTAGCCACTTCATCCTTTTTATGCTTACCATTTCATAGTTT  
ATATTTTCCATTATCTTATATTCACACTATTTATCCCTTTATACCTAAGTCCATGTCTT  
GTAGACAGTATGCAGTTAATTGTGCTTGATTATTTTACTCCTTTCTGACAATTTCTGC  
CTTTCCATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTTATTTGT  
[C, G]  
ACATCTCCCATCTTTTGTGTTGTTCCCTCATTTCCTTGTATTACCTTCTTTTCAGTTA  
TTTTTTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTAT  
TATTTTTTATTTGTTGCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAA  
ATCATATTGTACCCTTCACATAAAATAGAAGAAGCTTGACGAGTCTATGTCCCTTTAC  
ACTCCCATCTTTGTGCTATTGTTCCGTATGTATTACATCACGTACATTGTAAATCCA

66755 TTTTAACGTATGAATGTAGCCACTTCATCCTTTTTATGCTTACCATTTCATAGTTTA  
TATTTTCCATTATCTTATATTCACACTATTTATCCCTTTTACTTAAAGTCCATGTCTTG  
TAGACAGTATGCAGTTAATTGTGCTTGATTATTTTACTCCTTTCTGACAATTTCTGCC  
TTTCCATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTTATTTGTC  
ACATCTCCCATCTTTTGTGTTGTTCCCTCATTTCCTTGTATTACCTTCTTTTCAGTTA  
[T, A]  
TTTTTTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTATT  
ATTTTTTATTTGTTGCTCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAAA  
TCATATTGTACCCTTCACATAAAATAGAAGAAGCTTGACGAGTCTATGTCCCTTTACA  
CTCCCATCTTTGTGCTATTGTTTCCGTATGTATTACATCACGTACATTGTAAATCCAC  
AATAGAGTGTATAATCTTTTTCCAAATCCTTGTGTGAATTAATAATTTTATGAGTAGAA

66879 CAGTATGCAGTTAATTGTGCTTGATTATTTTACTCCTTTCTGACAATTTCTGCCTTTC  
CATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTTATTTGTCACAT  
CTCCCATCTTTTGTGTTGTTCCCTCATTTCCTTGTATTACCTTCTTTTCAGTTATTTT  
TTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTATTATT  
TTTTATTGTTGCTCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAAATCA  
[T, C]  
ATTGTACCCTTCACATAAAATAGAAGAAGCTTGACGAGTCTATGTCCCTTTTACTCC  
CATCTTTTGTGCTATTGTTTCCGTATGTATTACATCACGTACATTGTAAATCCACAATA  
GAGTGTATAATCTTTTTCCAAATCCTTGTGTGAATTAATAATTTTATGAGTAGAAAAAT  
ACATATAACATTTTATTCTTACCTACATACTTACCAGTTCTGCTTTCTTTTCATTCTTAC  
CTGTTTCAGTCTTATCTGTAAACCCGTTTTTCATTGTTGTCATTTCCATTAGCATTTTCAG

69156 GGCATGTCACTTCTGCCCCAAACCCCTTGGTAGCTTTCATTGCTCTTAGAATAACTTT  
GTGATCTACAACATCTTCTTCAAGGCCCCGCATGATACAAATCTGGCTATTTCTCTAGT  
TTCTTATTGCACCACCTTGTCCCTCATCCACCTTTTTTTTAGTCTCTCTCTTTCTTTGA  
ACTTCTACCACCAGGTTTTTTCACACGTTCTTCTTTCCCCATTAACAATGATCCACCATT  
CTCTTTCTTTATCCACTGTTACTCATCTCTAATGAAACATCATTTCCTAAGGATGGC  
[C, T]  
ATTCCTGGTTTCAGTCAGTCTATATTTTCATCCCCATCACATACTCTGTTTTACCTTATA  
TTTTTCTTTCAAAGCACTTATTTAAGTTGTAATTATGTGTTGTTATTTTATGTCTGTCT  
GCCCTCACAGAATCCACAGTCCAGGAGAACAGAAATCCTGCCTCTTTTATTTATACCACA  
TCCACAGTATTATTAGTGCCTGTCACCTAGTAGGTATGCAGTATGTACCTATTGAATAAA  
TGAATTGACTTCTGTCTTTTAGATCGTCTACTCATTTTATCATTGATGACAAACATAATA

69280 TATTGCACCACCTTGTCCCTCATCCACCTTTTTTTTAGTCTTCTCTCTTTCTTTGAACTT  
CTACCACCAGGTTTTTTCACACGTTCTTCTTTCCCCATTAACAATGATCCACCATTCTCT  
TTCTTTATCCACTGTTACTCATCTCATAACTGAAACATCATTTCCTAAGGATGGCCATT  
CCTGGTTCAGTCAGTCTATATTTTCATCCCCATCACATACTCTTGTTTTACCTATATTT  
TTCCTTCAAAGCACTTATTTAAGTTGTAATTATGTGTTGTTATTTTATGTCTGTCTGCC  
[C, T]  
TCACAGAATCCACAGTCCAGGAGAACAGAAATCCTGCCTCTTTTATTTATACCACATCCA  
CAGTATTATTAGTGCCTGTACCTAGTAGGTATGCAGTATGTACCTATTGAATAAATGAA  
TTGACTTCTGTCTTTTAGATCGTCTACTCATTTTATCATTGATGACAAACATAATACCTT  
ACATTCTGTAGTCTTTTTCACTCCTCAAAGAGGATTTTCTGCATAGCTCCTCTGAGCCT  
CACAAAACCCCTTAAGGAAGATTGTGAATATTATCAGATAAAGATTGTGAGACACAGAAA

70647 TCCAGTCATTTATAAAAGATGAAGAGGAGAACAGGTAGGCCAAAGTGGCTTTGTACTAT  
TAAAGGCTGCTTGATTTCTAAGTACATGTTCTTTGCCACCTTTCTGCCATTCCACATTCT  
AGAAGCCATGGGTAAAGTCAGCAGGGATCTTAACATGATAACATTGGTTTTAGGAGGTC  
TCGTGCATAATGGACCAGACTTAGAGCACAATGCTGTAAGGTAGTGATTTAGGTGAGCAG  
CAGATTTCTGGCTTTAGGAGTTTATTATCAGATGCTTTTTAAACGACTTGTGGCCAGGAT

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[C, T]  
CCTGCACCCATGGGAAGCATTGTAGCCTTAGAACTCTGGGAATTCTGAATATAATTCCTG  
AATCAATCGTAAGGATGCATATCTGATGCTTAGTGCAAACCAAGAGGCAGAAATATTGCA  
GGCAGTGTATCCCTGAAAAACAAATCTAGGTCAATTTTCCTGCCATGCTTCAAGCTTACTT  
TTCCATCCTTCCTGATGGTAGTACTAACTACATTTGTAGACCATTACGTGGTCAACACT  
GTGCTAAGCTGTTAGCTTCATTCTCTATGAGACAGGCACTCTTAGCCCACTTTACAATT

71867 TCTGTCTGGCTTTTCTCAACCTTTCTCTTCTGCACTTTCTTGATATAATCAAAGCACTA  
CCAGGAACCTCCAGAGTCGGCACCTTTTCATTTTGTGTTTCATTTAATTATTTCTCAGC  
TGCTAAGTGTGTTGACTGTTTAAGGACTCTAGTGGTAAATATTGTCTTTAGCCTGGCAG  
AAGCTGTGGTTTCCTTTGATGAGCTCACACGGTGTGGCTTTTAAGATGCTGCTGACCAGG  
ACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCAGCAGTGGGCTGGACCCCTTCCAGAAAG  
[C, T]  
GCTGCTGGGCCAAGAGGCTTCTCCAACCTCCCGCTGCCCCATCTAACCAACACCTCAG  
TCTCTTCTCCACCTGCTTCCCTGCCCTCTTCTTTCCCTCGCAGACACTTTCTTCTGCCT  
GGCAAAAGGAATCTTGTTCATGGAAGCCTCATTAAATCTGCATCTGCTCAGTTTGGG  
TTTGATCAGGGCTGCCAGAAGTATTTTAGCCCATGCAGTTGCGTAAATGAGATAGAGATT  
GGGGAAGGGGGAGGTGACTGTATAGGCAGAGGGTTTTTTAAAAAAGTGAGAAAGAG

71900 ACTTTCCTTGATATAATCAAAGCACTACCAGGAACCTCCAGAGTCGGCACCTTTTCATTTT  
TGTTGTTTCATTTAATTATTTCTCAGCTGCTAAGTGTGTTGACTGTTTAAGGACTCTAGT  
GGTAAATATTTGCTTTAGCCTGGCAGAAGCTGTGGTTTCTTTGATGAGCTCACACGGT  
GTGGCTTTTAAGATGCTGCTGACCAGGACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCA  
GCAGTGGGCTGGACCCCTTCCAGAAAGCGCTGCTGGGCCAAGAGGCTTCTCCAACCTCC  
[C, T]  
GCTGCCCCCATCTAACCAACACCTCAGTCTCTTCTCCACCTGCTTCCCTGCCCTCTTCTCT  
TTCCCTCGCAGACACTTTCTTCTGCTGGCAAAAGGAATCTTGTTCATGGAAGCCTCA  
TTAAATCTGCATCTTGTCTCAGTTTGGGTTTGATCAGGCTGCCAGAAGTATTTTAGCCC  
ATGCAGTTGCGTAATGAGATAGAGATTGGGGAAGGGGGAGGTGACTGTATAGGCAGAGG  
GTTTTTTAAAAAAGTGAGAAAGAGAAGGAAAACCTCTAAAGAAAAGAGTTTTATGGA

71901 CTTTCTTGATATAATCAAAGCACTACCAGGAACCTCCAGAGTCGGCACCTTTTCATTTT  
GTGTTTTCATTTAATTATTTCTCAGCTGCTAAGTGTGTTGACTGTTTAAGGACTCTAGT  
GTAAATATTTGCTTTAGCCTGGCAGAAGCTGTGGTTTCTTTGATGAGCTCACACGGT  
TGGCTTTTAAGATGCTGCTGACCAGGACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCA  
CAGTGGGCTGGACCCCTTCCAGAAAGCGCTGCTGGGCCAAGAGGCTTCTCCAACCTCCC  
[G, A]  
CTGCCCCCATCTAACCAACACCTCAGTCTCTTCTCCACCTGCTTCCCTGCCCTCTTCTCT  
TCCCTCGCAGACACTTTCTTCTGCTGGCAAAAGGAATCTTGTTCATGGAAGCCTCAT  
TAAATCTGCATCTTGTCTCAGTTTGGGTTTGATCAGGCTGCCAGAAGTATTTTAGCCCA  
TGCAGTTGCGTAATGAGATAGAGATTGGGGAAGGGGGAGGTGACTGTATAGGCAGAGGG  
TTTTTTTTAAAAAAGTGAGAAAGAGAAGGAAAACCTCTAAAGAAAAGAGTTTTATGGA

72369 TATTTTATAGCCATGCAGTTGCGTAATGAGATAGAGATTGGGGAAGGGGGAGGTGACTG  
TATAGGCAGAGGGTTTTTTAAAAAAGTGAGAAAGAGAAGGAAAACCTCTAAAGAAA  
GAGTTTTATGGAATTGGAAGAAGGATGGAGCACCTCTTTTGGGAGCATGAGGCTGGTGT  
CTCTGTTTATGCTCTTCCACTGGAAGCCATGGACACTTGCCATAATACCTGCTCTGGTC  
ACATGTCAGGGGAACCTCTGATCTCCCTTTCCATGAGCTTAGTTGGCCAGCCAGGGTGA  
[C, T]  
ACTTATGCTAGGGAGTGTGATTGATGTTGCTGCTTACAGATTTCCCTCCCACAGACCTG  
ATGGGGCAGCCAGGATAGTGGCAGAGAAGACAGAGCAATAGCAGGAAAGAGAGGACA  
ACATAACACATTGGAGGTTTATGTTCAAAGACGGGATCTAGGGGGTCAGAGAAAGCACA  
CCTACCATGTAATTGGTGCTGGAATCTGATGCCAAGTGACCCCTTGGCTTCTGAGGTTCT  
GAGAATCTTGCTTGTGCTTTTACGCCAGACTATGCCCTCACCTGCCCTGTACTTTAAA

72992 TGTTTGCATTGGATTGTTGGAGTGTGTGTCATGTTGTTGTGTTCTTGATTACAAGACA  
AAGAGATTAATAAAAAACCACATGCAGCTGTCACAGCTAATGTTTATTGAACTTTACTA  
TGCCACATGGTGTTTTAAGCATTCTATATGTGTTAACTCATTTTCCCTAATTTCTATGGAC  
TAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGAGGCACAGAGAGGTTGGGA  
AACTCATTTGAGGTCCTCCAGCTAATTAATAGTGGAGCCAGGTTTTGTACCCAGACAACC  
[T, G]  
GATTTGAGAATCTGCAGTCTAGATTAGTAACGTGTTGTTGGCCTGTACACATTTTAAA  
TGACATTCTGTACACAGAACCTTTATAGTAACCTTGTATTGTTGAGCTGAAAGCAGTCT  
GCAGATGTGCTGCTGGGATTTTCATTCATCTTCAAAGAGGTGTTTTTTTTTTTTTAAAG  
GAAAATGCTTTTCTGAGGGTGGTATCTAAATTCATAAAATCTTTACGATCAAGATTTTC  
ACAAATTTTCATCTGACTCTGTTGCATTGCCCTTCTTCCCATATTCCCAGTTAGTTTGTA

73154 TTCCCTAATTTCTATGGACTAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGA  
GGCACAGAGAGTTGGGAAACTCATTGAGGTCTCCAGCTAATTAATAGTGGAGCCAGG  
TTTTGTACCCAGACAACCTGATTTGAGAATCTGCAGTCTTAGATTAGTAACGTGTTGTTG  
GCCTGTCACACATTTTAAATGACATTCTGTACACAGAACCTTTATAGTAACCTTGTATT

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GTTGAGCTGAAAGCAGTCTGCAGATGTGCTGCTGGGATTTTCATTCATCTTCAAAGAGGTG  
 [-, T]  
 TTTTTTTTTTTTTTTAAAGGAAATGCTTTTCTGAGGGTGGTATCTAAATTCATAAAATC  
 TTTACGATCAAGATTTTCACAAATTTTCATTCTGACTCTGTTGCATTGCCCTTCTTCCCAT  
 ATTTCCAGTTAGTTTGTATTGATTGCTGCATCTCCCTTGAGCCCATGGTCCCCCACAACA  
 TTTCTTGCAGAAGTGTGCTGCTTACACTGTCAGGCAGCAGGAGCCTCTCTAGCGGC  
 CAGCCACAGTCCCTGCAGCTCCTTCAGGACGTTTAAATTTCCACATTCTATGCAGT

73164 CTATGGACTAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGAGGCACAGAGA  
 GGTGGGAAACTCATTGAGGTCTCCAGCTAATTAAGTGGAGCCAGGTTTGTACCC  
 AGACAACCTGATTGAGAACTCTGCAGTCTAGATTAGTAACGTGTTGTTGGCCTGTCA  
 CATTTTAAATGACATTCTGTACACAGAACCATTATAGTAACTTTGTATTGTTGAGCTGA  
 AAGCAGTCTGCAGATGTGCTGCTGGGATTTTCATTCATCTTCAAAGAGGTGTTTTTTTTT  
 [-, T]  
 TTTTAAAGGAAATGCTTTTCTGAGGGTGGTATCTAAATTCATAAAATCTTTACGATCA  
 AGATTTTCACAAATTTTCATTCTGACTCTGTTGCATTGCCCTTCTTCCCATATTTCCAGTT  
 AGTTTGTATTGATTGCTGCATCTCCCTTGAGCCCATGGTCCCCCACAACATTTCTTGCA  
 AACTGTGCTGCTTACACTGTCAGGCAGCAGGAGCCTCTCTAGCGGCCAGCCACAG  
 TCCTGCAGTCTCTTCTCAGGACGTTTAAATTTCCACATTTCTATGCAGTTACCTCACAG

74149 TTTGCTCAAGGTACATAACTAGTAAGTGGGTGGAGCTGTGATGTGAAACTGGGCAGTCT  
 GATTCTGGGACCTGTGCTCTTAATCACCAATCTATATTGCCTCCTACTTGAAAACATCCA  
 GGGAAAATGTTGAGATAGATCAGCTGAAATCTTCTTGACAGTAAAGCAGGGGCCACCTG  
 TCCTGGAGTTACATTTCATCTTGTTCATTGTCAACGATTGTGTTCACTGACACCCCTCTC  
 AGCCCAAGAACTTACCTGGGTGCTGTGACAATTGGACATGACTAGGAACAACCAAGTGACA  
 [T, A]  
 TGTAGCCCATCCAACACAGGGTAGGAAGTGGATGCTTGTCACTCTCTTTTGGTTATAAG  
 AAGCAGGAACCCAGTAAAGGCACCTTTTATATATCTATAAAGTTGAATATATAAGATATA  
 TGGGGGCCAGGCACAGTGGCTCACACCTGTAATCCGAACATTTTGGGAGCCCAAAGCAGG  
 TGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGACCAACATGGTGAACCCCATCTT  
 TACTAAAAATACAAAATTAGCTGGGCGTGGTGGCACACACCTGTAGTCCAGCTACTTG

74171 GTAAGTGGGTGGAGCTGTGATGTGAAACTGGGCAGTCTGATTCTGGGACCTGTGCTCTTA  
 ATCACCATCTATATTGCCTCCTACTTGAAAACATCCAGGAAAATGTTGAGATAGATCA  
 GCTGAAATCTTCTTGACAGTAAAGCAGGGGCCACCTGTCTGGAGTTACATTTCATCTTG  
 TTCATTGTCAACGATTGTGTTCACTGACACCCCTCTTCAGCCCAAGAACTTACCTGGGTG  
 CTGTGACAATTGGACATGACTAGGAACAACCAAGTACATTGTAGCCCATCCAACACAGG  
 [G, A]  
 TAGGAAGTGGATGCTTGTCACTCTCTTTTGGTTATAAGAAGCAGGAACCCAGTAAAGGCA  
 CCTTTTATATATCTATAAAGTTGAATATATAAGATATATGGGGGCCAGGCACAGTGGCTC  
 ACACCTGTAATCCGAACATTTTGGGAGCCCAAAGCAGGTGGATCACCTGAGGTGAGGAGT  
 TCAAGACCAGCCTGACCAACATGGTGAACCCCATCTTTACTAAAAATACAAAATTAGC  
 TGGGCGTGGTGGCACACACCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGATACTTG

74918 TAACAGGTGCTGAAAACAGGAAGTGGGAAGTTGCCAGTACCTTCCTGTCTTTTCCCCTGG  
 AACCAACCGGTTTCTTACTTGCTTCTCTCTGCACCTCTGTCTCATTTCCTCTCTCTTCA  
 GATGATTTTTCATTGTTGCATCACACATAGAAAATCAGGATCCACCCTCCCAAGTTT  
 ACATATCGTTGTTTTCAGGCAGCCATAGTATCCTTAAACTCCACATTCAGGGAGAAAGC  
 TTGGGTCAAGGATTACGCCAAAGGGCAGCGAAATGGAGTAAAGATGCAACTGCCAGGTCT  
 [A, G]  
 TGGGCAGCAAGGAGGCCGGAAGGAAGCCGCTGTTGTGGTCCAAGTGACAATTCAACAGC  
 TCAAAGCATAAGTAAGTTGTGTGCTTTTACAGATGGAGAACTGAGGCACAGAAGGAAC  
 CTGGCTGGGGTCCAGGTCTCTGGCCTTGTGTCAATGCTAGGTCACTGGATGTGGCGTCT  
 GATTTCTACAGGAAATGTGGTTTCTCTACTTTGTCCAGAGCCCACTCAGAGCACTGGCT  
 GGCCAGGGGGTCTTAGGGCCCTCTTAGGATAGTCTCAGGCCAACAGCCCCAGGCAGAAAG

75386 GGATGTGGCGTCTGATTTCTACAGGAAATGTGGTTTCTCTACTTTGTCCCAGAGCCCACT  
 CAGAGCACTGGCTGGCCAGGGGTCTTAGGGCCCTCTTAGGATAGTCTCAGGCCAACAGC  
 CCCAGGACAGAAGCAACCAAGTGAAGTTATGAAAGAAAGCTCTTGGCTGATCTGTCAAT  
 GGCACCTTGTAGAGCCAATACTTAGAACACCTGGATTGAATACTCATCTCCAAACCT  
 GTGTTCTTTCTACCAGTGACAAGCCCTTGTAAACCTCACACGCTCTCTATGAGGTGAGC  
 [G, A]  
 CTTGCAGATCCACACTTTAGATAAGCAAATGGAGGCTCAGAGGGTAAGCAGCTAGTTCAA  
 GGTATGCACTGAGCCAGGATGTGGACACAGCTCTGTGTCTGATTCTTAAGGGCTGTG  
 CTTTAGCCACTTTGCAATACTGTGCTGTCTGCTTCATTTCTCTCATCTGTGAGATGGGAA  
 CGATAATACTCAACTCACATGGATACTGTATGAGGAAAACAGATAAAGAGAGAAAGT  
 GCTTTGAAAACATAAGCAGCCCTGGCAGATGGGAATTATTTTGGCTGTGACACACATCC

77751 CAATGCCAATGTTTCTGAAGCCCATATTAAATGCCAAATCTGAGTCAGCTACTGGAGGT  
 AGAGACATGAATAAGATGGTCCATATTATTTTAGAGGATCTTTGGTTGCAAAGGGCAGA  
 CCCCAGCTTGAATTCACCTTTGGAGAAATTGGGATTTTTTTGGCTTGCATAAGCAAAGCA

FIGURE 3, page 49 of 61

[illegible]

78264  
ACCTTAAGGAGCTTTCTGTCTAGAGGGAGGTATGGACATGGACAAGTAATCAACAGCTAC  
AAAGCAGAGCTGCCAGCTCTGCAACACAAGAGCCCTGAGAGGCATGACAGGGGCCAGGTG  
GGGATCCATGTGGGTCTGTGAATGAGGAGGGGCGATGAGAAAGAGCTTCAGGAGAG  
CTGAGGGACACTTGAGCACACCCTCAAAGAATGACTGGGGGTCTAGGTTATACAAGGGA  
GGAAGTGCACCCGAGACAGAAACAATCACATAAGCAAAAATGCAGAAGAATATGAGGATC  
[G,T]  
GGGAAGGGCAAGTAGCTCAGTAGTGTGGAGGCCAAGGGACACGAAGGAAGGTGATAAAG  
CCCTGATGTTAAGGATAGAAAAATCAAAGTCCTTTGAAAATCATGTGGAGTTAGGATCTC  
AAGAACCCTACAAGGATTTCTTTAGAATAGAATCAAAGAAAAACAAGTTTACAGTCTGT  
GAGGGTTGCATAGGAAGTAACTGTTGGTGAGAAATGTTGGCTTGAGAACACATATCCATAA  
CACAAATGGTGTTTTAGAGGATTTGGGGGAAGGGAGAGAAAATCTCAAATTGTCTCAGTAA

83609 TTTGGGCAATTGTAGCAATTTTAAACTATGTTAGATGGCTAGAGATTCTTGAGAATATT  
TCTTTTCTTGAAAAATCATAAGGCTTTGGATAGTGGTACCTATAGAAGCTGACATCAGCA  
GCAGCCTGCCTCCAGTCGATCAGGGCCTTTGGAAGCTTACGGGGCTCCTCTACTGACAGC  
CCCATCGGTTTCCCTCCAGCACAGTAACTCAGCATTGACTCTGGGTAGTAGAGGGTGT  
TTATGGAATCTGATTCACTCAGAAAAGAGGTGGATGCAAACATTTCCAGAGCAGAAGG  
[C,T]  
TTGGCATGTCTGGTCTTAGGCAGAGGGAAGCTGGAGATACTTGTCTATTGTTCTTGAGAT  
TCCAGCAAAAATAGCCCATTTACAGAGGAAGAAGATATCAGGTCAAATGAAGGCTTTGGTG  
CTACAACATTTGTCTTAGAAAAAAAAGAAAGAAATTTGGCCAAGTGCAGTGGCTCAGCACT  
TTGGGAGGCTGAGGGGGGCAGACCTATTGAGATCAGGAGTTCGAGACAGCCTGGCCAAAC  
ATGGCGCAAACTCCGTCTCTACCAAAAAGTATTAATAAATAGCCGAGTGTGGTGGCGGGCT

87770 CTCCCTACCTGTCCCTCCTTGACCCACAGAAAAATTGCCGGGATATGAAAGTTAATTATG  
ACCCAAGGGAATTGGTACAGATGGGGAAGAAAGAAATGCATTCAAGAGCATTTCCATCAG  
TATTGAAATTACACAGAAGGCTGGTGAAATTTGGGCTATCCATTCTTGCCTCCCTCTGTGC  
CCATAATTCCCTTGGCCTCCTTCAATTTCAATTTCCCTTTGGTTCAGAGGAATGCTTGATG  
GCTTAAGCTAGCCTCAGTTGGCCAAGCATTGGAGAAACAGAGAGGTGTATGACACAGCTA  
[C,T]  
ACTCCCATTGGGGCTTACAGGGCAAGGTGAGAGAAGACAGAAGTTGTATGTGCTGGGTGCC  
ACGTGGTAGCTACAAACTAGAAATGAGACCAGGTTCTGGAGAGGGAAGAGGGGCTTGCAGAC  
CTGAGTCATGGGGACAGTTTCTTCAGGAAATGGGATCTCAGCTCTGCCCTGTGATGCAGG  
CTTACATAATAAATATGTTCTTCTTGTGTTGTTGTTATGTTGATTTAATAAGAGATTTGT  
TTTAAGAAGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCCAGAGCAGGCAGCA

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TCCTTGGCCTCCTTCAATTTTCATTTTCCCTTTGGTTCAGAGGAATGCTTGATGGCTTAAG  
CTAGCCTCAGTTGGCCAGCATTTGGAGAAACAGAGAGGTGTATGACACAGCTACACTCCC  
ATGGGGCTTACAGGGCAAGGTGAGAGAAGACAGAAGTTGTATGTGCTGGGTGCCACGTGG  
[T, C]  
AGCTACAACTAGAAATGAGACCAGGTTCCGGAAGAGGAAGAGGGCTTGACAGACCTGAGTC  
ATGGGGCAGCTTTCTTCAGGAAATGGGATCTCAGCTCTGCCTTGATGACAGGGCTTACAT  
AATAAATATGTTTCATTGTTGTTGTTGTTATTTGTTGATTAAATAAGATTTTGTTTTAAGA  
AGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCCAGAGCAGGCAGCAGCAAAGG  
AGATTAGGAATATAACCCCTTGGAGACGTTCCCTTACCTACCTGGTGGCTGGATTACCTA

87866 TGCATTCAAGAGCATTTCCATCAGTATTGAAATTACACAGAAGGCTGGTGAATTTGGGCT  
ATCCATTCTTGCCCTCCCTCTGTGCCCATAATTCCTTGGCCTCCTTCAATTTTCATTTTCCC  
TTTGGTTCAGAGGAATGCTTGATGGCTTAAGCTAGCCTCAGTTGGCCAAGCATTGGAGAA  
ACAGAGAGGTGTATGACACAGCTACACTCCCATGGGGCTTACAGGGCAAGGTGAGAGAAG  
ACAGAAGTTGTATGTGCTGGGTGCCACGTGGTAGCTACAACTAGAAATGAGACCAGGTT  
[C, T]  
GGAAGAGGAAGAGGGCTTGACAGACCTGAGTCATGGGGACAGTTTCTTCAGGAAATGGGAT  
CTCAGCTCTGCCTTGATGACAGGGCTTACATAATAAATATGTTTCATTGTTGTTGTTGTT  
ATTGTTGATTAAATAAGATTTTGTTTTAAAGAAGATTTTGTAAAAACAACCTGAACAAATGC  
AATCTCCTGCCAGAGCAGGCAGCAGCAAAGGAGATTAGGAATATAACCCCTTGGAGACG  
TTCTTCACCTACCTGGTGGCTGGATTACCTAAAAGCTTCAGCTAAGTAGGGTCACCCCCC

88238 CTTGTATGACAGGGCTTACATAATAAATATGTTTCATTGTTGTTGTTGTTATTGTTGATT  
AATAAGATTTTGTTTTAAAGAAGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCC  
AGAGCAGGCAGCAGCAAAGGAGATTAGGAATATAACCCCTTGGAGACGTTCCCTTACCT  
ACCTGGTGCCTGGATTACCTAAAAGCTTCAGCTAAGTAGGGTCACCCCCCAAGAAATAT  
TTTAAAAAATGAAATCTGATATTTTAAAGAAATCTTATCAAGGATATTTAATTGGACT  
[A, C]  
TTTACACCTATTTAGGGTCAGTCGGTTTTTGGACAAGTATGCAGGGGCTTGGAAATCAGAC  
CACTGGGGTCAAATCCTAGTTCTGTCACCTTCCTAGCTGGGTGACCTTGGACAAAGTTACC  
TGACTTCTAATAGCTTCAGATTCCTCATGGGCAAAATAGAAATGCTACTAGTACTTAATA  
GTGCTCTGAGAAGGATTCAATGAGAAGGATTAATGTATGTAAAGCACAGTGTTCGCCA  
TAGGAAGCTGTTATTTATAAGGGAGGGGAGCATCCTAAGGTCTCCGAATTTAGGAGAAC

89219 AGAGGGCAGTTGGAAGAACTTCACAAGACAATCCAGCCTGATTGTTTTGACATGCCTGACT  
TCAGGCTGCTAAAAATGAGCTCGAGGAATCAGATAGGAAAAAGAGATAGGTGATGCAATT  
TTATTCATCTCCCAATTTTCTGAGTCAAGAGTTGTTTGTTTAACTCCAGTTAAATAGT  
ATTTATCCAAATTTCTCGGGTGTCTGTCCAAAGAAAAGTACCCAGATCTACAAATTAGA  
ATCTGGGACTGGGACTTAGGAATTGGCACTTTACAATTATACCAGATGTTTCTAATATG  
[A, G]  
GTACTTCAACCACTACCTTTATAGAAGTGTGCTGACCTAGGACCTCTCTTCTGGCAGGTGAA  
GTGGAAGGAGGTTTTGTCGAAGGGAGATTCTCCACTTCAACTTGAGTGTCTTGGCTTGTA  
TCCGCTTTGTTGGTTCTGATTTCACCAAGGCTTTTCATCTTCACATAAATTTTCTTCAGC  
TTTAAATAAATAGTTTTTGGTAACCATTTGGTATACTGGAAGAACATTAGATTTGGAGTCC  
AGGTGGCTTGAGTTCAATTTCTGCTCTGCCATTTACCAGCTGTGTGACATTGGGCAAGT

89331 ATGCAATTTTATTCATCTCCCAATTTTCTGAGTCAAGAGTTGTTTGTTTAACTCCAGTT  
AAATTAGTATTATCCAAATTTCTGGGTGCTTGTCGAAGAAAAGTACCCAGATCTAC  
AAATTAGAACTCGGGACTGGGACTTAGGAATTGGCACTTTTACAATTATACCAGATGTTT  
CTAATATGAGTACTTCAACCACTACCTTTATAGAAGTGTGCTAGGACCTCTCTCTG  
GCAGGTGAAGTGAAGGAGGTTTTGTGCAAGGGAGATTCTCCACTTCAACTTGAGTGTCT  
[T, C]  
GGCTTGATACCGCTTTGTTGGTTCTATTTACCAAGGCTTTTCATCTTCACATAAATTT  
TCTTCAGCTTTAAATAATAGTTTTTGGTAACCATTTGGTATACTGGAAAGAACATTAGATT  
TGGAGTCCAGGTGGCTTGAGTTCAATTTCTGCTCTGCCATTTACCAGCTGTGTGACATT  
GGGCAAGTTGCCAACCTATCTATGTCATTTCTCATGTAAGATAATCCCACTTACCAG  
GCCACTTTTAGGACCCAGTGAAATGATGTGTAACCATTTTAGGAACACTGGATCATTTCT

90794 GATTGGCCAAGGTCACACAGCTATAAGCAGTAGAACTAAGATTTTAACTCAAGTTTCTA  
TGGCCCCAGAATTTATGTGTTTCTCTCCATACCACAGGGACAGGTGCAAGTGAGAGAT  
TTTGCTGGAAGCACTGGGCTTTTGGAGCAGGCCATATAAAATTTCTGAGCCAGAGCTCA  
ACTAAATATTGGAAGAGACTGGGCCAAATATAAGGCTTCTATCTAAGCAGCACCTGTGT  
TTCTCAAGGACTGAGGAAATGAAGGGGAGGGTTGGCAAGGCTGCATTTCCAGGGTGC  
[A, G]  
TGATTATATGGCATGGGGGTGGGGGCCATTATGATGCCCGGACATGGAACCTTACACCACT  
GCAGAAAGGGTGTGATTAGAAGCCCTAAGCCAGAGAATGTTCAAGTGTGATAATGCCATT  
ATTTTTCCTTCATTTCAATAGATTTTTTTTTTAGATGGAGTCTCACTGTGCGCCC  
AGGCTGGAGTGCAGTGGCACCATCTCAGCTCACGGTAACCTCTGCCTCCTGGGTTCAGC  
AATCTTGTGGTCCAGTTCTCAGTAGCTGGGATTACAGATGTGCACCACCACGCTTG

92404 TGCTCTGCTACCTACCTGCCAGCTGTTTCCAGGGATGTGGTAAAGATGAATGGGCAAGA

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TCTGGGAAAGTGTGTTTGAATCCTTGATTAAAGGCCCTCCAGGCAGATGTAGAATTTTAA  
 ATGTGTTATATTACTGCCACTATTGTTATGCTTTCTTTTATCACCCAGAAATTCACCAT  
 CTCTGTGTTTACAGGTGAACGAGTCTGCCTGACTCTTACCTGCCCTGAATGGCATTGGAAAG  
 GTAGCAGCCCTGAGATGTCCATATAAACAACATGTTTTTAACCAAGGGATCAGGAGGC  
 [C, T]  
 TTCTGGCTGGCTCCTGTCTGAGTGGTCTACCTCTCTATAACTCTAGGCTTTCCCAAGC  
 TTATTTTATTTCCATCAATAGGACAGGAATATGTAATGTCTGCTTGAATGAGTATTG  
 GCTACAAGCCATCTGCCTCTGAACAGAGGTGAAAAGTGGAAATCGGAGGAAGGGCAGATG  
 TCTTTTGCAAGGGAACAGACTGTTTTCTGCCACTGCACTCTGCCAGGCAAAAGAGTAA  
 AGGAACAGCACTCAGGAGAATTCAGTGAAGCGAGGGCAGGGTGCAAAAGGAACCTTGAGAA

92672 CAAACATGTTTTTAACCAAGGGATCAGGAGGCCCTTCTGGCTGGCTCCTGTCTGAGTGGT  
 ATCACCCTCTCTATAACTCTAGGCTTTCCCAAGCTTATTTTATTTCCATCAATAGGACAGG  
 AATATGTAATGTCTGCTTGAATGAGTATTGGCTACAAGCCATCTGCCTCTGAACAGA  
 AGTGAAAAGTGGAAATCGGAGGAAGGGCAGATGTCTTTTGCAAGGGAACAGACTGTTTT  
 CTGCCACTGCACTCTGCCAGGCAAAAGAGTAAAGGAACAGCACTCAGGAGAATTCAGTG  
 [A, C]  
 AGCGAGGGCAGGGTGCAAAAGGAACCTTGAGAAATGGTACTGGGACCCAAAATCAGATT  
 TGGCATTCTGGGAAAGAAATGGGCATGGGTGGGGTTTTATCTGTCAATAAAAGCATC  
 CAGAAATGGGGCTAGAAGGAAGTAAATTCAGTTGCCACCTCTGCCTACTGGACAGCCACGG  
 AGAAGTCTCTCTTATCCAGGTGAGGAGCCCTCCGGAGTACATACTGATACCATTTGGTT  
 CTCCACACATACCCCATGGAGATAAAACAGGACCTGGAAGCCCTGTCCGTGTTTAA

92684 TAACCAAGGGATCAGGAGGCCCTTCTGGCTGGCTCCTGTCTGAGTGGTCTACCTCTCTA  
 TAACCTCTAGGCTTTCCCAAGCTTATTTTATTTCCATCAATAGGACAGGAATATGTAATG  
 TCCTGCTTGAATGAGTATTGGCTACAAGCCATCTGCCTCTGAACAGAGGTGAAAAGTGG  
 AAATCGGAGGAAGGAGCAGATGTCTTTTGCAAGGGAACAGACTGTTTTCTGCCACTGCAC  
 TCTGCCCAGGCAAAAGAGTAAAGGAACAGCACTCAGGAGAATTCAGTGAAGCGAGGGCAG  
 [A, G]  
 GTGCAAAAGGAACCTTGAGAAATGGTACTGGGACCCAAAATCAGATTCTGGCATTCTGG  
 GAAAAGAAATGGGCATGGGTGGGGTTTTATCTGTCAATAAAAGCATCCAGAATGGGGCT  
 AGAAGGAAGTAAATTCAGTTGCCACCTCTGCCTACTGGACAGCCACGGAGAATCTCTCT  
 TATCCAAGGTGAGGAGCCCTCCGGAGTACATACTGATACCATTTGGTTCTCCACACATA  
 CCCCCATGGAGATAAAACAGGACCTGGAAGCCCTGTCCGTGTTTAAACCAATGGGATTG

93132 CTGCCTACTGGACAGCCACGGAGAACTTCTCCTTATCCAAGGTGAGGAGCCCTCCGGAG  
 TACATACTGATACCATTTGGTTCTCCACACATACCCCATGGAGATAAAACAGGACCCCT  
 GGAAGCCCTGTCCGTGTTTAAACCAATGGGATTGAAACATGGAATGAATGCCCAACAT  
 CCACCCCTGTGAGAGACCAAGAGCAGTGTGGATTAAACAGGGAATGTTACCCCTGAAAAGG  
 CATTCAGCTTCCACTGGGGCAGCAGGTACAGTGCAAGATGATCCCACTTAAATTCCTAA  
 [G, C]  
 ACAGGAAATAAGGAAAGATGTTGTGGAACTCAAGACCTCTCAAAGCATACTCCTTTGTA  
 GTTCTTCCGCAGACCAAGCAGGAAATTCAGAAAACACCCCTACCTGGTTCCAAACAGCA  
 CCTGCCAAACTTCTCACCCCTCTCTGACCCTGTCTGGGAGTTAAGAAAAAAAATCAC  
 TTTATTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCATCAAATTAAGTGACATG  
 TACGACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTTGGTTCCATTATCTCATT

93537 TGGTTCCAAACAGCACCTGCCAACTTCTCACCCTCTTCTGACCCTGTCTGGGAGTTA  
 AGAAAAAATAATCACTTTATTTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCAT  
 CAAATTAAGTGACATGTACGACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTTG  
 GTTCCATTATCTCATTTAATCCTCTCAAAAACCCCTGTAGGTAGGTTTTATTATTGCACT  
 CATCTTAGATTAAAGGAACTGAGGCTCATAGAGATTGCGTAATTTGTCAAAGCCCTAAA  
 [A, T]  
 CATAATTAAGTCCAGATGTCTCTGATTCTAAGGCCAGGCTCTTAATCAGTAAATGA  
 TCAATGAATAATGATTTTCATGGCATCTGTCATCGGAAAGAACAAATGGAGAATATGCTT  
 AACCAAGTCATAACCAATAAATGAACCTGACAGCAGAGCCGTGATTCTAGCCAAGATG  
 ACTATTTTCATGCATGTTTTGAAGGCCAGGAAAAGGAGGTAGACTTGTGTTGGGAAGGGA  
 AACAGGAGCTATCAAGGTGAACCTTTCTAAGAGTAGCCCAATAATAGTGCTCGGGAGGG

93557 CCAAACCTTCTCACCCCTCTCTGACCCTGTCTGGGAGTTAAGAAAAAATAATCACTTTA  
 TTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCATCAAATTAAGTGACATGTACG  
 ACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTTGGTTCCATTATCTCATTTAAT  
 CCTCTCAAAAACCCCTGTAGGTAGGTTTTATTATTGCACTCATCTTAGATTAAAGGAACT  
 GAGGCTCATAGAGATTGCGTAATTTGTCAAAGCCCTAAAACATAATTACTGCCTCCAGA  
 [T, C]  
 GTCTCTGATTCTAAGGCCAGGCTCTTAATCAGTAAATGATCAAATGAATAATGATTTTC  
 ATGGCATCTGTCTCGGAAAGAACAAATGGAGAATATGCTTAACCAAGTCATAACCAAT  
 AAATGAACCTGACAGCAGAGCCGTGATTCTAGCCAAGATGACTATTTTCATGCATGTTTT  
 GAAGGCCAGGAAAAGGAGTTAGACTTGTGTTGGGAAGGGAACAGGAGCTATCAAGGTGA  
 ACTTTTCTAAGAGTAGCCCAATAATAGTGCTCGGGAGGGAGTAATGTGTGCAAGAATAG

FIGURE 3, page 52 of 61

95067 AGAGAAATGGAAGCAGGGAGATAAATTAGGTGGTTATTGCAAGAGGCCAGGTAAGAAGAG  
AAAGTGGTTTAAAGTAGGGTGGTGGCAGAGAAGACGGTTCCAAGCAGAGGGGGACCACG  
CTGACAAATAAGCGCGGGCCACTCACGCAAGCCCAACAAGGCAGAGGCAGAAAGGCAAAA  
GTGAAGGCCAGAGAAAACCTGGACACCACCTTTCCAGAGCACAGTTCAAAGGCAATGTCCT  
CAAAGAAGACACTCCACCTCCTCCCATTTCCTCCCTATTGCCTAAAAATAAGAAGGATA  
[C, T]  
GCGGCCTATGGCAAACCTTGGGCAGGCACGTGGGAGCTGAGCTCTTGCAAAGGGCAGATA  
GTTCTCTGGTGAGAGAGAAAAGGAAGGGCCAGTGAGGAGTGAAGGAAGAGACGAACAGA  
GAGCCCGAAAGGCTGAGAACGTTGTCTGGCTTCTGAAAGGCTTAAGGGGTTAGCTCTGG  
AGGGTGAACATAAAGCCCTAGTTATATTAAACACACACGCACACACGCACGCACACACAT  
GCGGCACACACACACACACATACACAGTTGAAGGAGACCTGCAGTTTCCAAAAACAA

96000 TATTATTGATCTTGATTACTGAGTTTTTAGGTGTACCCTTAAATGTTGCACCTCTGACTT  
ACTAGTCTCACCCTGATCCCTGTCTGGATCTATGCCGTGTCTGTTCTATATCAGCCTCTT  
GCTTTGACCATAAGAATAACTTTCAGACCTTTAAGCATAGAGGAAATAGGATTTCTGTCTC  
CCTTCCCCACCTTTGTGATAATCTCAGCTTCTGCTTTTAAAGTCTATCTCCCAAGTAGTT  
TGCTTACTATGTTCTCCCAAGGTCACAGGTTCTGTGAAACTAGCAGCAGGCTAGATTG  
[T, C]  
CACATTAGCACAAAGGATCCACTATTCTGCAGCCGAGCTGGGACAAGCACTTAGGCCCCA  
CTGACTCCAACCCCTCAATAGCCTGGGACCTACGTTGTCTCCAGGTGGTATAAAAACAAGA  
ATTTCCCTTTGACTGGGAGAAAAAGGGAAGAACTCTAAATTTGGAACACAGGTCATCTCG  
AATTCTCACAGGTGGAATTTCTGACAACCCCTTTGGGACCCACAATTCAACACACCCCA  
AATGGGGACAGTAGCTAACATGCAACCTGTAGGCTGTTCTGTCTATCCAGTGCCACTGTGC

96877 GGGAAATTAAGTGGGAAGGCAGGGCGTTTTGACTGCATTTGACCCAAGTCCTGAAGAGCCA  
GCTCCTCTCTCTTCTCAATTATTAGAAGGTTTTGTTTGGACCCAGTGTTTACGCTGTATA  
CAATACAAACTTCTCTCTTTTCTACTTGGATCAAATTTGTTCTCTCAAATAAGATTCCC  
AGCAGTGAGAGAAGACAAGACAGAGAGATCCAACATCTCTAAAGCCATGAATCAGATAAC  
CAGCCACTTGTCTCTTCTAGTGCTGGGAACAGATACACTGTTAAATAAAATGATTTTATA  
[G, T]  
ATTCTTCTCACTGCCTTTTCCAAGAAGGGGATTTATCAACTTCAGGGCACAGCAATCATT  
ATTCCCAGACTACTGGCATGCATATATATATATATTTACTTCTCTTGACTTAGAAAAAG  
AGAGAAATTGGAGTTGTGAATATTCTGTCTCCCTCACCCAGCCCCCTTGAAGTGAGTCA  
GGACAACTTTGGGGCCCAATGGAGCTGTAAGTAAGTGAAGTGCATGCAGAGATGAACC  
TTCACAGACCCACTGATATGGAGGTTGAAGATTAAATTTCCCTTTGAGAATAACTGGGTA

97271 ATTTACTTCTCTTGACTTAGAAAAAGAGAGAATTGGAGTTGTGAATATTCCTGTCTCCC  
TCACCCAGCCCCCTTGAAGTGAGTCAGGACAACTTGGGGCCCAATGGAGCTGTAAGT  
AAGTGAAGTCAATGACAGAGATGAAACCTTCACAGACCCACTGATATGGAGGTTGAAGATT  
AAATTTCCCTTTGAGAATAACTGGGTAACACTCATAAGAGACTACTTTCAAGAAGGCCA  
GATCTCCCTCTAATGTATAGTGCAACGTTCCCTAACCTCAGCCCACTCCGTCTATACCC  
[A, C]  
ACTCAGATGAATACACACATAAGCAGTAATATAAAGCACTTCCACCATAGGGCAGCAAA  
GAAGGAGGGAAATCTTTATTATGGAAGAGTGAAGGAAGGAAGGAAGGAAGGAAGGG  
AAGGGTAAGAGGAAGAAATTCAGGGTGAGCAGAGGAATGACATGTTTGGGGCATAATGA  
AGATAATTGAAGTGACAGATTGTATGGAATAATTTGAAATATCAGGTGGCAGGCCAGG  
CATGGTAGCTCATGCCGTGTAATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCACCTG

97470 ACTGGGTAACACTCATAAGAGACTACTTTCAAGAAGGCCAGATCCTCCCTCTAATGTAT  
AGTGCAACGTTCTTAACCTCAGCCCACTCCGTCTATACCCCACTCACATGAATACACAC  
ATAAGCAGTCAATATAAAGCACTTCCACCATAGGGCAGCAAGGAAGGGAAGGGAATCTTA  
TTATGGAAGAGTGAAGGAAGGAAGGAAGGAAGGAAGGAAGGGAAGGGAAGGGAAGGGA  
TCTCAGGGTGAGCAGAGGAATGACATGTTTGGGGCATAATGAAGATAATTGAAGTGACAG  
[G, T]  
TTTGATGGAATAATTTGAAATATCAGGTGGCAGGCCAGGCATGGTAGCTCATGCCTGT  
AATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCACCTGAGGTACAGAGTTTGAGACT  
AGCCGGGCCAATATGGCAAAACCCATCTCGACTAAAAATACAAAAATTAGCTGGGTTTA  
GTGGCGCATGCCGTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAAATCATTTGAGCC  
TGGGAGGCAAGGTTGAGTGTGAGTGTGAGATCATGCTACTACACTTCAGCCTGGGTGAGAG

97518 CCTCTAATGTATAGTGCAACGTTCTTAACCTCAGCCCACTCCGTCTATACCCCACTCAC  
ATGAATACACACATAAGCAGTAATATAAAGCACTTCCACCATAGGGCAGCAAGGAAGGA  
GGGAAATCTTTATTATGGAAGAGTGAAGGAAGGAAGGGAAGGGAAGGGAAGGGAAGGGA  
AAGAGGAAGAATTCTCAGGGTGAGCAGAGGAATGACATGTTTGGGGCATAATGAAGATAA  
TTGAAGTGACAGATTTGTATGGAATAATTTGAAATATCAGGTGGCAGGCCAGGCATGGT  
[G, A]  
GCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCACCTGAGGTGAC  
GAGTTTGAGACTAGCCGGGCCAATATGGCAAAACCCATCTCGACTAAAAATACAAAAAT  
TAGCTGGGTTTAGTGGCGCATGCCGTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGA  
ATCATTTGAGCCTGGGAGGCCAAGGTTGCAGTGAGTCGAGATCATGCTACTACACTTCAG  
CCTGGGTGAGAGAGCTTTCTTTTTTCTCTCACAAAAAAGAAAAGTTTCAGGTTGACAGA

FIGURE 3, page 53 of 61

98476 TGTCCCTTTCCCTCTAGCCACAGGTAACACGCTCTCCAGGCACTGGGAAAGTGGGTAATT  
AGGAAAGCAGAGGAGTACCCATGGGCTGTGATGCCAGTTATAAACCCAGACATTTTCAGA  
ATTAACAGAATGAGCATCAAGTCTCAATGGGTCTACATCCATAAACATGTCCAGCAGT  
CAGCTCTTTACTGTCTAGTAGAGACAAATGTTCTACACTTTCCCTAGGGGAAGCCACAT  
CCTCAGTAGGTTATCTCTGATGAGTCCAGCTAGTCAAGGTATGTAGAAGCTGCATGCAG  
[C, T]  
AGAGGGCTCAAAGGAGGGTCCAGAATAGATACCAAAGCAAAGGGGAGTCTGTGCACGTT  
CTCACACGACCCCGAAACACTCTTTTGTTCACAAAATAGATGGTGTAGGGTAGTTCCA  
AGAGATCATTTAGCTCAGGTTCTGCCTCCATAAAATAAATAAGCCTTCCATATTAGTTG  
TCTGTTGCTGTGTAGCAAATTGTGAGAAACGTAGAGGCTTAAAGCAATACCCATTTATTA  
TCTCGCAAGTTCTGTATCTCAGAAGTCCAGGCAGGCTTGACTGGGTCTCTGTCCAAGTT

98779 AGGGCTCAAAGGAGGGTCCAGAATAGATACCAAAGCAAAGGGGAGTCTGTGCACGTTCT  
CACACGACCCCGAAACACTCTTTTGTTCACAAAATAGATGGTGTAGGGTAGTTCCAAG  
AGATCATTTAGCTCAGGTTCTGCCTCCATAAAATAAATAAGCCTTCCATATTAGTTGTC  
TGTTGCTGTGTAGCAAATTGTGAGAAACGTAGAGGCTTAAAGCAATACCCATTTATTA  
TCGCAAGTTCTGTATCTCAGAAGTCCAGGCAGGCTTGACTGGGTCTCTGTCCAAGTTCT  
[C, T]  
GTGAGACTGAAATCAAGGTGTTGGCCAGGCTGGGATCTTATCTGGAGGCTCTGAGGACAT  
ATACGCTTCCAACCTTATTTCAGGCCATCAGCAGAATCCCGTCTCTTGTGGCTTGAGGTTG  
GAGGTCCCCGTTTCTTGTGCTGCTGTCTCCAGGACCACTCTTTCACCTACAGGCTGC  
CTATGTTCTTATTCAACAAGACACCGTTTCTTCAAAACCAAAGCAGCATGTAGAATCTTT  
CTTGTGGCTCGTATCTTCTGCTTTCCTTCTTCTTTAGCCAGAGAAAGTTCTTTGCTT

99218 CTGGCTGTCTCCAGGACCACTCTTTCACCTACAGGCTGCCTATGTTCTTATTCACAA  
GACACCGTTTCTTCAAAACCAAAGCAGCATGTAGAATCTTTCTTGTGGCTCGTATCTTT  
CTGGCTTTCCTTCTTCTTTAGCCAGAGAAAGTTCTTTGCTTTTAAAGGTTTATGCGATT  
CAATCAGGCCACCTGGATAATGTCCCTATTTTAAAGGTAAGTGTGATACCGTATAACAT  
TTCAGGAGTGATAACAGCACATTTACAGGTTCCAAGGATTGGGCGAGAACATCTTTGGGG  
[C, G]  
AACATTTTAGAACTCTGCCTCCCACTCACCATAATCCTTTTAAAAACCAATCTTGA  
AGCCTTTTTTCCCAAAGGCTTTTGAATAAGCACATTATACCTAATCTCATCAGACA  
CCCCTTTGAGCAAACACTAGCATGTGGCAAAATAGGCTGTAAATCAATCAGAACTATTC  
TTTCCCAACCAATCTTTCTCAAAACACATTGGGAGAATCTGACACTGTCAAGTGTATACC  
AGAGCAGACTCCTACCATCTCACAAGAGCTGACTGTTAAATGTTTAGTAATTGTGGACAT

100538 TGTAACATATTGGTAAGTTAATTGAAATGTGGTTTCTAGATCTCTCATCATCCTAGTCAC  
CCTACTCTGGATGTACTCCAAAGTCCCTCTCAAGATATAGTGTGAGAATTGACCTAATTA  
GTCCAGCATTTGACTGAAACGCTAGACTTTGACTCCAGCCCCCATCTTGACTGGCACT  
AGCATTTCAAGCGCTTCTCTCTTTCCCTGGGTCTTTAATAGAGTCAGAGCGACTTCTCC  
AGGGGATCTTTTGGCCATGGACCAGTAGCATCCACACGCTGGGGCTTGTAAAAAGG  
[C, A]  
AGGCTCTCAGGCCCCACCCAGATCTACTGAATCAGAATCCACACATTAACAAGATGCTT  
GGGTGATTCTATGTGCACATTAAAGTTTGAAGAAGCACCCTTTCAGGACGAGATGACACA  
CTTATTTTAAAGAGAACGCCAATTAGAGACCCTAAGCCTTCTCATGGAACAGGGGCTTC  
CCCTCAGACTTGGGAGAGGGGTGAGGAAATATCAGTGTGGGTGTTGGTGACAGGTG  
GCGGTGGGGGTTTCAAGAGCCAGAACCTGGCAGGGGAAGAGATGGGG

101045 GGAAATATCAGTGTGGGTGTTGGTGACAGGTGGCGGTGGGGGTTTCACTCCACGTTCA  
AAGAGCCAGAAACCTGGCAGGGGAAGAGATGGGGCAGTGACACCCAAACCGAAAAATAAA  
GGAAACTACAAGAAGAACCCAGCTAAGAGATGTGAGGCTTCTGAAAGCTCCCATGGAAAG  
GTTGCGAGCTCCTCCACCTGCTCGGTCCAGCTGCCCCAGGTCAAGGAAGCTCTGTGAGTG  
TTAGCTGACCCGAGCAGCAAGGATACATTCAGAAGTGATGAAAGGGAACGCTTCTTGAC  
[A, C]  
GGGTAAAGAGTCAATTCAGTAGGAATGAGACAGGAAGAGGTCACAGAGTCAGAAGCCAGC  
CTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGTTAGGAGGCCACCTACTCA  
CAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTCAGTGTG  
GAAATTCTGTGCTTCTTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCAC  
CTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAATCCTAGCTCAGC

101232 GCTCCTCCACCTGCTCGGTCCAGCTGCCCCAGGTCAAGGAAGCTCTGTGAGTGTAGCTG  
ACCCGAGCAGCAAGGATACATTGAGAAGTGTGAAAGGGAACGCTTCTTGACAGGGTAA  
AGAGTCATTCACTAGGAATGAGACAGGAAGAGGTCACAGAGTCAGAAGCCAGCCTGTAC  
TCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGTTAGGAGGCCACCTACTACAATAC  
AATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTCAGTGTGAAATT  
[C, G]  
TGTGCTCTCTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCACCTGCATA  
AGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAAAATCCTAGCTCAGCTGCTTAA  
TAGCTGTGCGACTGAGCAAGTTACTTAACCTCTTTGAGCATCTGTTTCTCATCTTTAAA  
ATGGAAGTAATCATAATTGACCAGGCCAGTGGCTCACACCTATAATCCAGCACCTTGG

FIGURE 3, page 54 of 61



AAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGAGTTTGAGACCAGCATGGTGACACCTC

101266 CAAGGAAGCTCTGTGAGTGTAGCTGACCCGGAGCAGCAAGGATACATTGAGAAGTGATG  
AAAGGGAACGCTTCTTGACAGGGTAAAGAGTCATTGAGTGAAGTGAAGACAGGAAGAGGT  
CACAGAGTCAGAGGCCAGCCTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGG  
GTTAGGAGGCCACCTACTCACAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGT  
GCTGCTGGGATTTGAGTGTGAAATCTGTGCCTCCTACTGTGGCTGCAGCTTGGGAAT  
[G, A]  
ACATCCAGAGCTTACCCACCTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATAG  
GCTAAAATCCTAGCTCAGCTGCTTAATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTT  
TGAGCATCTGTTTTCTCATCTTTAAATGGAAGTAATCATAATTGACCAGGCCAGTGGC  
TCACACCTATAATCCCAGCACCTTGAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGA  
GTTTGAGACCAGCATGGTGACACCTCGTCTCTAGAAAAATACAAAAATTAGCCAGGCAT

101290 TGACCCGGAGCAGCAAGGATACATTGAGAAGTGATGAAAGGGAACGCTTCTTGACAGGGT  
AAAGAGTCATTGAGTAGGAATGAGACAGGAAGAGGTCACAGAGTCAGAGGCCAGCCTGT  
ACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGGTTAGGAGGCCACCTACTCACAAT  
ACAATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTGAGTGTGAAA  
TTCTGTGCCTCCTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCACCTGC  
[A, G]  
TAAGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAAATCCTAGCTCAGCTGCTT  
AATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTTTGAGCATCTGTTTTCTCATCTTTA  
AAATGGAAGTAATCATAATTGACCAGGCCAGTGGCTCACACCTATAATCCCAGCACCTT  
GGAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGAGTTTGAGACCAGCATGGTGACACC  
TCGTCTCTAGAAAAATACAAAAATTAGCCAGGCATGGTGCCAGGTGCCTGTAGTCTTAG

101326 AAAGGGAACGCTTCTTGACAGGGTAAAGAGTCATTGAGTAGGAATGAGACAGGAAGAGGT  
CACAGAGTCAGAGGCCAGCCTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGG  
GTTAGGAGGCCACCTACTCACAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGT  
GCTGCTGGGATTTGAGTGTGAAATCTGTGCCTCCTCACTGTGGCTGCAGCTTGGGAAT  
GACATCCAGAGCTTACCCACCTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATA  
[G, A]  
GCTAAAATCCTAGCTCAGCTGCTTAATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTT  
TGAGCATCTGTTTTCTCATCTTTAAATGGAAGTAATCATAATTGACCAGGCCAGTGGC  
TCACACCTATAATCCCAGCACCTTGAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGA  
GTTTGAGACCAGCATGGTGACACCTCGTCTCTAGAAAAATACAAAAATTAGCCAGGCAT  
GGTGCCAGGTGCCTGTAGTCTTAGCTACTCGGTAGGCTGAGGTGGGAAGATTATATGAGC

102342 ACCCTGTCTCAATAAATAAATAAGAAGATGAAACAAGAAAGTTCTTCTTATGGTTCTCA  
TGGTGGTGAGCACAATGTAAGCATATATATTATCTTAGAATTCTTCTTCTGTATAAAG  
AAGGCTCCTCCAAATGTATTAATCATCTGTTCAACTAATAAATGCTGCTTACTCCCACTT  
TCACTCTAAAGGAACCTCAATGGCTAAAGAGAACCCTTCCCCTTGCAGCACCTGAGGAT  
CAGAGCCCTGATTTGAATGTCTCGATGCAAAGGACTATTTCAAAGGCCAGCCAGGCAG  
[C, A]  
CCAGACATGTATTTCTAATCGTCTCCAGGTTGTTTGATAGAAGATCTCCTGGGAGCAGG  
TTTCCGCAGCAGCTCAGCCAGGCTGTGTTCTGGGAACGCTGTGTGCATTGGCACCTCCCTT  
GGCAGAAAGCTTGGAGGAAAGGCAGGTGCAGGCTCTGGAGCCTCTGACAGCATTACTGGC  
TCTAGGAGTAGCTGCTCAGGATAATCTGTCCCCATGACCATTAAAGTAACTGCCACTGTGC  
GGGAAGAAGAACTGGAATGGGGGGCCCCAAAAAATCTGAAAACCCCTCACTTGAACCAGT

104489 GTTCAAGAGCTGGAAGGGATTTTCTAGCCTCCAGGCAAGGTAATACCATAAGTCCCAAC  
AGTGATGCCCTCCCTGGGAATGATCTCAATGGGAGAATCCTATACCCTGCCTCCTCCATT  
CATTCTCTGCTCTGATGGTGGTTCTGGCTGGCTAACCTAAGTTACTCTTGCCACTAGTTA  
ACGCCTGTCTTATTTCTCTGTGCCCCACCTAAGATGTCAATCAAAACAGCAGGAGCCAT  
GCTATGTACATGACATGTTGTCTGTCCAGCCAGAGCTTGTGTGCTGATGGGGGCACAGA  
[C, T]  
TAGATTTTGAGAGAAATCTCTGTGTACCACCTTAACATTCCAACCCCTCTAATAGCC  
CATTTAGGATTTATCATACTGTTTCATCCAAACCTTTTCATGACCTGATTTCTATTTCCAG  
CTTCAACCACCCCTTGGGTCAACACCTGTACTTATTGAGTTTCCCTAGTTTCTGAATTA  
ATGACTGAAGATGATAAGCTTCCCTTACATATGACTCTCAAACCACCAACTGGGATTGT  
TGTTACTCTTAGTGATAATGTTGTCTATTTATGAACTTTAATAGGGAACACAACCCCT

105266 AGGCCAGAGCATCATGGCCTTTCACAAGTTGAAGAGCCACGGGCTTCTACGGTAGCCAG  
CCACGCTTTTCCATGACTGGGGTGGGTGTGGCAAGTGATGAGGGTTTGGAGTTCATGTGG  
TGGGGTGGCAGGACCAAGGTGCTTGGTAAGTGCTGTTGCATTCACTTCAGGAGCAAAGG  
ACCAGATCTGATTCTGCAGGATCAACAATATGGACACTGCAGGCTCTGTAGACATCCAA  
GCTCTAATGGTGACTTGGGGAAGCTCAGGAGGGCAGGGAGTTGTACCATTAGAAATGT  
[A, G]  
AAGATTCTCTATTTTATAAAAAAGAAAAAGGAGACTGAAGGCCTCAGTCTCCTCCAACA  
AAGCCAGGCTGTGGGGTAGCAGAGTCTCAAAGGGTGCAGGCCATGGCCACTGCCAGGG  
CTCCTGCTCAGGCTCCTCACTCCCAACTGAGGGGAGACCCAGTTCCACACCCACCCA

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CCTAGCAGTGTCTCACACCCACCGGAGAGGTCTAAACATCTTCCC TGGGAAATGGTCCC  
 AAAATGTCCCTGCAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTAAAG

105338 ATGACTGGGGTGGGTGTGGCAAGTGATGAGGGTTTGGAGTTCATGTGGTGGGGTGGCAGG  
 GACCAGGTGTCTTGGTAACTGCTGTGTCATTCACTTCAGGAGCAAAGGACCAGATCTGAT  
 TCTGCAGGATCAACAATATGGACACTGCAGGCTCTGTAGACATCCAAAGCTCTAATGGTG  
 ACTTGGGGAAGCTCAGGAGGGCAGGAGGTGTACCCATTAGAATGTAAAGATTCCCTAT  
 TTTATAAAAAAGAAAAAAGGAGACTGAAGGCCTCAGTCTCTCCAACAAAGCCAGGCTG  
 [T, C]  
 GGGGTAGCAGAGTCTCAAAGGGTGCAGGCCCATGGCCACTGCCAGGGCTCCTGCTCAGG  
 CCTCCTCACTCCCAACTGAGGGGAGACCCAGTTCACACCCACCCACCTAGCAGTGTCT  
 TCACACCCACCGGAGAGGTCTAAACATCTTCCC TGGGAAATGGTCCCAAAATGTCCCTG  
 CAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTAAAGCTCCAATAAATA  
 AATAATGAAGGAAGAAAAAAGAAGAAATGCAGAACAGGGTGAATAAATGGCAT

105570 ATTCCTATTTTATAAAAAAGAAAAAAGGAGACTGAAGGCCTCAGTCTCTCCAACAAAG  
 CCAGGCTGTGGGGTAGCAGAGTCTCAAAGGGTGCAGGCCCATGGCCACTGCCAGGGCTC  
 CTGCTCAGGCCCTCCTCACTCCCAACTGAGGGGAGACCCAGTTCACACCCACCCACCT  
 AGCAGTGTCTCACACCCACCGGAGAGGTCTAAACATCTTCCC TGGGAAATGGTCCCAAA  
 ATGTCCCTGCAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTAAAGCTC  
 [C, A]  
 AATAAATAAATAAATGAAGGAAGAAAAAAGAAGAAATGCAGAACAGGGTGAATAA  
 ATTCGATGTATTTTAAATGTTTATATTAAACAACTAACACCTTTTAAACATGAAAGCA  
 ATATAATTGTGCTAGCCACAAATCATCGTAGGACTGAGAAAGGAATCGTGATTCTGAGA  
 GCCCTAGAGTTAATGTATCCAGCTGGCTCATCCCTGTGACTGCAGAACCTGTTTGGAG  
 ATAGTGTCTAGTAGCTTTTCAGGCCCTCTGTGAATTGCCAGAATGTGTGACATGAGCCAAA

105928 AAAATTGGCATGTATTTTAAATGTTTATATTAAACAACTAACACCTTTTAAACATGAAAA  
 GCAATATAATTGTCTAGCCACAAATCATCGTAGGACTGAGAAAGGAATCGTGATTCTG  
 AGAGCCCCTAGAGTTAATGTATCCAGCTGGCTCATCCCTGTGACTGCAGAACCTGTTTG  
 GAGATAGTGTCTAGTAGCTTTTCAGGCCCTCTGTGAATTGCCAGAATGTGTGACATGAGCC  
 AAATTTCCCCCAGCATCCCCGCCGCCACCACCACCCCGACCCCAACCTCCCCGCCG  
 [G, A]  
 CTCCCATAGAATAGTCACTGCCATACAGAAAAAGAGAAGTTCCTACTATTTCTGGCAAGA  
 TTTCCACAAACAGTTTGTCCCTTTCTGCTTTCATGAAATAAACCATTTGGATCAACGTC  
 AGCTGATTGCAAAAATTTCCCTTGTCTCAAAGCAAGACTGATAAGGAAGCAACATGG  
 GAGGACCTTAGTGGCCGAGCCTTTATGTGTATGTTATTTCAATTGCTCTCATAACTGCCCT  
 GGGATGCTGTAAGCATGATTCATCCTGTTTGTGTTATCAGTTAAATTATGTATCCAAGATT

106459 TAACTGCCCTGGGATGCTGTAAGCATGATTATCCTGTTTGTGTTATCAGTTAAATTATGT  
 ATCCAAGATTACACAGCCTATCCAGGATTAGAATCAGAGCCCTCGGCTGTGAAGCTTGA  
 GCTCTTTCTTTTCACTTTCAAATATGATCATGCCATGAAGCAGCACAAGCCAGGAGG  
 AGCCCACTGAGGCTGGAGGGGTCCACTGGCAGCCACTCTCCTCCGTGCCCCGTGTGGTGT  
 GGGGCAAACTTGGATCTTTCTGAATCTTTTAACTGTTTCTCTCTTCCCGTTTTTGTCT  
 [G, C]  
 CTGGCTGACTTGTCTTACTCTACTCCTTGTGTTATGATACTTATTTTCCATCCACAGC  
 AAAACAATTACATCAAGGTAATTGATGATGAGGCATATGAGAAAAACAAGAATTACTTC  
 ATTGAGATGATGGGCCCCGATGGTGGATATGAGTTTTCAGAAAGGTGTAGTACCCTGT  
 CCTCCACACTAACACTAACATTCTTCTCTCTCTCTGTTTCTTCTCTCCAACCCATT  
 GTCCTCTCTCTCTTGTCTTCCACCTCTCTGGTTCCCTTTCCCTTGTCTCTCTCTTGC

107710 CTTCAATGACCCCATACATCCCATGGCCTCCAATAGACAAGTCAAGAAGTCCCTTCCCTGA  
 ATAGATCATACTGTGGAGCAGGAGCTGCCAGTACTGAGGGCAATGTTCCCTTCCCTTCC  
 AAGTGTCCCTCATGCCCTCCAGTACATGCCTGTTGTACAGAGCACCCCAATCCCATCC  
 CACAGCAGAGTTCTGTCAGCAGAGAAACAGGCTCACACCTTGTAGACAGCCCTGGGGTCC  
 CATATCTAGGGCCAACAGAAATATTTCCAAAAAATGCCTCTTGACAATCAATGAGCTTT  
 [C, G]  
 TCTTTTGTCCGCTGAGCAAGGTATAAAAAAGATGTCAAAAAGTACCCAAAAAGGTAATA  
 AAAATGTACAGTCGTGCATCACTTAGCAATAAGGATACATTCTGAGGAAGGTGCTCTAA  
 GCAATTTTGTATCGTGGGAAATTTATAGAGTGTACTTTACAAACCTAGATGGTGTAGC  
 CTACAACACACCTGGACTATGTGGGCCTATTGCTCCTAGGCTACAAACCTGTACAGCATG  
 TGCCTGTACTGAATATTGCAGGCAACTGTAGCACAATGTTATTGTGTATCTAAACACAT

108062 AAGGTAATAAAAAATGTACAGTCGTGCATCACTTAGCAATAAGGATACATTCTGAGGAAGG  
 TGTCTTAAAGCAATTTTGTATCGTGGGAAATTTATAGAGTGTACTTTACAAACCTAGA  
 TGGTGTAGCCTACAACACACCTGGACTATGTGGGCCTATTGCTCCTAGGCTACAAACCTG  
 TACAGCATGTGCTTGTACTGAATATTGCAGGCAACTGTAGCACAATGGTATTGTGTATC  
 TAAACACATCTAGACATAGAAAGGCACAGTAAAAATATCGTAGTATATAGCCTTATGGG  
 [G, A]  
 CCACATATTGTAGATGTGGTCTGTCTATTGAGCAAAACGTTTTTATGTAGCATGTGACTGTA  
 CTTGTAAAGTACACACACCACAAATGCACAGCAAGTCTGTGCCCTACAAGCCCCTTTGG

FIGURE 3, page 56 of 61

112879 TTGGTCTCTCTTTTTCGACAACCGTGGGCTCATCTTGACAAGCTGCCAGATGCTTCCTA  
ATTACTCACAGTCCTATGCTCTTTCCAGCTTGTCCTCGGGGTGCTCGAGCAGGAATAAAT  
GACTCTCACCTGACCCAGGGGATCAATACAGGGGAAAGTTCAGCTCCAGCTTCTCTCATG  
AGCAGCAGCAGGAAAAACCCCTCAGGTA'TTGTGTCACTCAAGCTGGCCTCCAGGAT  
CTTGCTGACCCATCTATAACTGCTGAGCAGAAAGCTTTGGATTCTAGGAGACAATGACCA  
[A,G]  
AGAATGATGGAATTCAGCCAACCTGCAGGCCTTCTACTACTCTAGGGATGGGCCAGATG

TTCGGTGGCATGTATGAGTGAAAACCAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTT  
 TGTCTGACCCACCTGTGTTTATGTTATGTGCTGGGATCTCTGATCTCCCTGGAACCTGGG  
 GGAAGCTCTTCCACGCAAACTCCCGGAAGGAGCAGAATAAACAAAGCTCTTGCCATCTAT  
 CTATCTATCTATCTATCTATCTATCTATCTATCTATCTACCTATCTGCCTATCTATATCT

113245 TGGCATGTATGAGTGAAAACCAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTTTGTCT  
 GACCCACCTGTGTTTATGTTATGTGCTGGGATCTCTGATCTCCCTGGAACCTGGGGGAAG  
 CTCTTCCACGCAAACTCCCGGAAGGAGCAGAATAAACAAAGCTCTTGCCATCTATCTATC  
 TATCTATCTATCTATCTATCTATCTATCTATCTACCTATCTGCCTATCTATCTATCTA  
 TCTCAATGTAGTGAGGAAAGCCATTGATCCATTAACCTTTGGAATTTACATGGGAGATA  
 [C, T]  
 CTAAGAAAGTGAACCTGCCTTGTGTTATGTATCATGCAGACTCTGGATCCACATATATCTCA  
 GTGGCTGTGAATATAGGATGATTGATCAGGCTGAGTTGCATTCTACAGATTCTTAG  
 GAAAAAATTGATTACAGACATGTCCCTGTTCCCTCCACACACACTCCTTCCT  
 CAGCAATCTCTATCAGTCACCAACTACAGTTGAATATGTGGCAAGCTCTTCCAGACCT  
 TTATCTGAGAGCAAGGAGTGAGGGCTGTACTAAGATATCATAGAAATGAAATGTGGT

113265 CAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTTTGTCTGACCCACCTGTGTTTATTA  
 TGTGCTGGGATCTCTGATCTCCCTGGAACCTGGGGGAAGCTCTTCCACGCAAACTCCCG  
 GAAGGAGCAGAATAAACAAAGCTCTTGCCATCTATCTATCTATCTATCTATCTATCTATC  
 TATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTCAATGTAGTGAGGAAAG  
 CCATTGATCCATTAACCTTTGGAATTTACATGGGAGATACTTAAAAAGTGAACCTGCCT  
 [T, C]  
 GTTATGTATCATGCAGACTCTGGATCCACATATATCTCAGTGGCTGTGAATATAGGATG  
 ATTGATCAGGCTGAGTTGCATTCTTACAGATTCTTAGGAAAAAATTGATTCACAGA  
 CATGTCCCTGTTCCCTCCACACACACTCCTTCTCAGCAATCTCTATCAGTCAC  
 CAACTACAGCTTGAATATGTGGCAAGCTCTTCCAGACCTTTATCTGAGAGCAAGGAGT  
 GAGGGCTGTACTAAGATATCATAGAAATGAAATGTGGTGTGTACAAGTTTCTTAAT

113497 GAGGAAAGCCATTGATCCATTAACCTTTGGAATTTCTACATGGGAGATACCTAAAAAGTG  
 AACTGCCTTGTGTTATGTATCATGCAGACTCTGGATCCACATATATCTCAGTGGCTGTGAA  
 TATAGGATGATTGATCAGGCTGAGTTGCATTCTTACAGATTCTTAGGAAAAAATTG  
 ATTCACAGACATGTCCCTGTTCCCTCCACACACACTCCTTCTCAGCAATCTCT  
 ATCAGTCACCAACTACAGTTGAATATGTGGCAAGCTCTTCCAGACCTTTATCTGAGAG  
 [C, G]  
 CAAGGAGTGAGGGCTGTACTAAGATATCATAGAAATGAAATGTGGTGTGTACAAGTT  
 TCCTTAATTCTTAGATCTTAACTCTAAGAGGGTTCAGCATAAGTACAAATTCAGGGCT  
 AGAGACAACCTGTATTGGGTGTGTCTTAACTCAGTTTCCCAATCCACATAGGGACCTTG  
 CATTTGTCTCTCTCATCTATGTATAGCTGTTGGTATGACAGTTTCTGTGTTCCAGAATA  
 CCTGAACCTGTACTTACCTGTCTTCTGAAACAGAAAAATCACCACAGAGATCTA

114486 CCCCATGGTCATTTTTGCCACTCATAAGTTAGCTACTCTGGCAGGGTGCACCTTACACA  
 GTTTTCATGATAACTGGATTCTCACTCCTTTTTTACAGAAATGGATGTGATAACCTGGTA  
 TCCTACACAGTCATGAGTGACCAACCTACCATTTGGTTCCTCATCTCCTCCATT  
 CCTAGCCCTAGGGTAGCCGGGAAAGCATAGGAGCAAAATGCCCTTACCAGGGCCCTGGTGC  
 TCAGCAGCCTCTCCGGCTGCTCACACCTCTTGCTGCTGCTCTGTGCATGCTCCAAAGCT  
 [G, T]  
 CTTTTTGGCTATGGCTGCTGAGCTCTCACCTACTAAGCTCTCTGCTTTCCCTATGCTGCC  
 AGCAACCAACAAACCTGGTGATCTTCAAGATGGGACATTATGCTCTTTCCCTTTCTT  
 TCTTCCATTTTCTGGTATCCATTTGCAACAGCGCTCCTGTTATCTCCAGTAAGAGGT  
 GTCTTGTCCCTCTTTTCTTCCACTTCTTGCCAGTGCCATTATTTGGTTAAGACCAA  
 TGTCCTTTGATTTATTGAATAAGAACTGCAGGCTCAAGTTAAGCTGACAATTTCTCCAA

114686 GAAAGCATAGGAGCAAAATGCCCTTACCAGGCCCTGGTGCTCAGCAGCTCTCCGGCTGC  
 TCACACCTCTTGCTGCTGCTCTGTGCATGCTCCAAAGGCTGCTTTTTGCGTATGGCTGCT  
 GAGCTCTACCTACTAAGCTCTCTGCTTTCTTATGCTGCCAGCAACCACAAACCTGGT  
 GATACTTTCAAGATGGGACATTATGCTCTTTCTTTCTTTCTTCCATTTTCTGGTAT  
 CCATTTGCAAAAGCGCTCCTGTTATCTCCAGGTAAGAGGTGCTTTTCCCTCTTTTCT  
 [T, C]  
 TTCCACTTCTTGCCAGTGCCATTATTTGGTTAAGACCAATGTCCTTTGATTATTGAAT  
 AAGAACTGCAGGCTCAAGTTAAGCTGACAATTTCTCCAAGGACTGGGAGATTTATTTTC  
 CCACATGAAGCAATTATGAGAAAGCAATTGTGAGGAAGGCAATTCCTTGAGCATCACTTC  
 TGTCTGGGACGTGGGTTAAGGCATAGCTGATCCTCTCTGGGACCAGGAAGAGAAATTA  
 GCTTAACAGGAGATGGTGGGTCATAGACTTCTCCTGAGTCTTAATTCATCTGCCATCTC

114817 TACTAAGCTCTCTGCTTTCTTATGCTGCCAGCAACCACAAACCTGGTGATCTTTCAA  
 GATGGGACATTATGCTCTTTCTTTCTTTCTTCCATTTTCTGGTATCCATTTGCAAA  
 CAGCGCTCCTGTTATCTCCAGGTAAGAGGTGCTTGTCCCTCTTTCTTTCCACTTCT  
 TGCCAGTGCCATTATTTGGTTAAGACCAATGTCCTTTGATTATTGAATAAGAACTGCA  
 GGCTCAAGTTAAGCTGACAATTTCTCCAAGGACTGGGAGATTTATTTCCACATGAAG  
 [C, A]

FIGURE 3, page 58 of 61

AATTATGAGAAAGCAATTGTGAGGAAGGCAATTCCTTGAGCATCACTTCTGTCTGGGGAC  
GTGGGTAAAGGCATAGCTGATCCTCTCTGGGACCAGGAAGAGAAATTAAGCTTAACAAGG  
AGATGGTGGGTATAGACTTCTCCTGAGTCTTAATTCATCTGCCATCTCATGTTTGTGGG  
GAAGACAGTGTGAGATTGAGAGCTGGAATCTCCTAATAATTTGTGACAGGATTTGAAAA  
AAAAATACCTTTAATCCCAAGGGATCCAGGAAATAACCAACCTGTTGTGAGAATAGGAAA

115600 AGAGAATTTATTTTGAAGAGATTCTCATGCAGAATCTAGGTGCTATAGAGGACGTACACC  
TACTTTGAGAGTATGCTTGCATGAGTGGAAACCAATCATAAACAACATTCAACTTCATGA  
GCAGATATGAAAGCATTTTCAGCATATCTAGCAATACTATAACTCTTTGTGCAAGCAGAG  
TGGCCTACACAAGACAGTTTCAATATATTTTAAAGAACGCTTACATTTTCATCAGTCCT  
TTGAACACAGAAAAAATGTTAAGGCCACTTAAGAGGCAAAACATCTTACAGAGTTCATT  
[G,T]  
ATATTTCAAAGTCACCTACAGGCTACATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAA  
GGACATACGCCTTCTGGGAGCCTTAAACAACAACAAAAAATGTAGGTAACCTCCTACATTT  
TTCTTTTGTGGAAAAACACAGTTTACTCCAGCTTCTTGGCTTTTGTCTCTTTTATATA  
CCAACAAAATAAGGGCTATCCTCAACCTCTGTTCTTCATTCTTCTCCCAGGGTATTGAT  
TTCATAACATTGGGTTTTCTTCTTACTTCACTCATCTCTTGCCTGTGAAGGTATGTA

115668 GAGTATGCTTGCATGAGTGGAAACCAATCATAAACAACATTCAACTTCATGAGCAGATAT  
GAAAGCATTTTCAGCATATCTAGCAATACTATAACTCTTTGTGCAAGCAGAGTGGCCTAC  
ACAAGACAGTTTCAATATATTTTAAAGAACGCTTACATTTTCATCAGTCCTTTGAACAC  
AGAAAAAATGTTAAGGCCACTTAAGAGGCAAAACATCTTACAGAGTTCATTGATATTCA  
AAGTCACCTACAGGCTACATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAAGGACATA  
[A,C]  
GCCTTCTGGGAGCCTTAAACAACAACAAAAAATGTAGGTAACCTCCTACATTTTCTTTTG  
TGGAAAAACACAGTTTACTCCAGCTTCTTGGCTTTTGTCTCTTTTATACCAACAAA  
ATAAGGGCTATCCTCAACCTCTGTTCTTCTTCTTCTCCAGGGTATTGATTTTCATAAC  
ATTGGGTTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
TTGTTCCAACCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT

115745 ATCTAGCAATACTATAACTCTTTGTGCAAGCAGAGTGGCCTACACAAGACAGTTTCAATA  
TATTTTAAAGAACGCTTACATTTTCATCAGTCCTTTGAACACAGAAAAAATGTTAAGG  
CCACTTAAGAGGCAAAACATCTTACAGAGTTCATTGATATTCAAAGTCACCTACAGGCTA  
CATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAAGGACATACGCCTTCTGGGAGCCTT  
AAACAACAACAAAAAATGTAGGTAACCTCCTACATTTTCTTTTGTGGAAAAACACAGTT  
[A,G]  
CTCCAGCTTCCTTGGCTTTTGTCTCTTTTATACCAACAAAAAAGGGCTATCCTCAA  
CCCTCTGTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
TACTTCACTCATCTCTTGGCTGTGAAGGTATGTAAGGCTTCTTGTTCCAACTCTTCC  
TCCACCCGCCCCCTCACATAAATGCATAACAAAGATTGTGATTTAATTTAAGTTCTT  
TCTACTTTTAAACATATTTGCAACATCAATAGAAGCTAAAATGGGAAAAAGGAAATGTTT

117230 AATAATACTGTGCTGCTAAGATAGGCATTGTGATATGGTGCTTAAACCTGCAAGTAAAG  
GAAAGAGTATGGAATCTGTGTGCTTTTCTAAGGGCTTTTCCCAGAGTAGCTTGCAG  
TCTGGCTTCTAGGGTGTCTGGCCTATAGCCAGAACCTTAGATTACCCAGATTTACCTTC  
AGAAATTAACATACTAGAGACTCAAAATCAATAGACTAAATGAAGTCAGGCTGTAGAGGA  
TGTCTGCTGACTTGGACATATGCAGAAAGACATGGATCCTTGAGAAAAATTGTTTCCAA  
[A,C]  
AGTGGCCACCAGCACTAGAGGAAGGACAGCACCAGGACAGCTCCCAGACATTTTAGGAT  
TGCTTCTGTGTTTGGTGCCGGAACACTGAGCAAAACAGCGAACTCAGGAAGTCTCCACA  
CACTCTCATACCATCTTCATGCAGTCCAATAAGAAAATTTTACATAAAATATAAGGCT  
GTCTGCTTGGTAATTTAAACCTTGGCTTATAGTCTTTTCAGTGAATTTCTTCTTCTGCA  
AATCGAGAGTTGGAGTCTCAGACTGCCCTTGCTTCACCAATTTCCCAGCTAGAGACAA

118908 CCCATTTGTAACATGAAACAAATAGTGCTGACCATTGTATGCTAGGAATATTGTTAGGA  
AACATAATATAGAATGTGAAATAAGTGGACTAGAAAGTCTGAGATGTATTATCATTATT  
GTTTAACTGTGTTTTTAAAGCAAAAATATTAAACTCACTACTACAGGGCAGATATATT  
AACATCATATTATTATTATTATTATTATTATTATTATTATTATTATTATTATTATTATT  
CCAGGCCAGGCAGTGAAGGACTCAGCCTGTAATCTCAGCACTTTGAGAGGCCGAGATGG  
[A,G]  
AGGGTCACTTATACCTAGGAATTTGAGACCAGCCTGGGCAACATAGGGAGACTCCATCTC  
TATAAAAAATAAAACAAAATAAAAAATCAGCTCAGTGTGGTTGTACATGCCTGTGGTCCCA  
GCTACTCAGGAGGCTGAGGTGGGAGGATGGCTTGAGCCAGGAGGTTGAGGTTGCAATGA  
GCCATGATTGCACCACTGCATCCAGCCTGGGTGACAAAGTGAGACCCTGTCTCAAACAA  
AACAAAACAAAAGATTACAACCAAAAACAAAGGGAATAGAAGGATTGCCCTCAAAGAG

120430 CCCAAGGCCCCAGAGCCAGAGCAAAAAGACAGCCAGGAAGAGAGGTTTGCTGCTGCTGC  
TGCTGCTGCTACCCACTTTTCTCATCAGCTGCTTAGATCTTTCTAGCTCCCCCTCTGA  
TGACCTGACTGTGCCCCCAAGACAATAAACGGAATGTAGGCCACATCATCTACCTGCT  
CCTTTTACAAAGAGGGGACTGAGGTTTCAGAAATAAGAGATGATTTACCCAGCTTACAG  
ATTTTCTTCATGGCAAAGCTGGAATGAGAACCAAGTGTCTGACTCCTGTTCTTTCAA

[C, A]  
 CCCAGCTTCTACCGGTTATGCCAAAACATGACAGAAGTTGCCGTTGGCAAGGCACAGGCA  
 TGCCCTCAGCATACCCCTCCCCTCCAGGGCTGCTGAGTGGGCAACTCTGCCCACATTTCCTG  
 GCAAGGACAATCAAGGCCCATCCTGCTTTTTCCCATGAGATGTTTGGAGGAGGGCACTGG  
 CTCTGCAGTATATTCTCGTGATCTGGAATGACAGCCATCCCTCAGGGGACAGATAATGAC  
 CAGAACCACAATGGTTATTGCAGCAGTCAGGTCAGAAAATTGAGAGGAGCCCTGCTGGC

120830 CAACTCTGCCCACATTTCTGGCAAGGACAATCAAGGCCCATCCTGCTTTTTCCCATGAG  
 ATGTTTGGAGGAGGGCACTGGCTCTGCAGTATATTCTCGTGATCTGGAATGACAGCCATC  
 CCTCAGGGGACAGATAATGACCAGAACCACAATGGTTATTGCAGCAGTCAGGTCAGAAAA  
 TTTGAGAGGAGCCCTGCTGGCATCCAGTGAAGAGTGGCCACACCGAACTGATTTCACTTC  
 TCTCCTTAGACAACAAAATGCAGCCTGTGCATTCTCCTTTCTTTTTTTTTTAATTATAC  
 [A, T]  
 TTAAGTTCTGGGTACATGTGCAGAACATAGAGTTTTGTTACATAGGTATACACGTGCCA  
 TGGCGGTTTGCTGCACCCCATCAACCCGTCATCTACATTAGGTATTCTCCTAATGCTATC  
 CCTCCCCTATCCCTCACCCCTGACAGGCTCCAGTGTGTGATGTTCTCTCCTGTGTCCA  
 TGTGTTCTCATTGTTCAACTCCCACTTATGAGTGAGAACATGCAGTGTGTTGGTTTTCTGT  
 TCTTGTGTTAGTTTGCTGAGAAATGATGGTTTGATCCTCCTTTCTTTCTGCTCCACTGTC

121926 TTGGTCTCAAAGATTTCAGTCACAGCTGTTGTTTTCTGGCATTTGGCACCTCTGTCCAG  
 GTGAGAGTGAGAGGTGCTTGAATTTGCAAAGAGGATTTACCTGGTTCAAATGACCCCTG  
 GACTCCATCTCATTATCTTCCACACCATCTCAGATCTGAACCTAACAGAGCCTCTGCCCT  
 TAAAGTGCACAAAAGTCAATCAAAGAGATGAATAATGACATTAGTAATGACAGCTAATAT  
 TTCTTGAGCACTTTCAATGTGACAGACACCATGTGTGTTAGCAATTTACACATTTACAT  
 [T, C]  
 TTCCCCCTGTAATGTTTCCCAAAGCCCTATTAATAGGGTAAGTTATTATCCCCACTTCA  
 CAGACAAAGAACTGAGGCCCAACAGAGGTTAAGCTACATGCCCAAGTAAAGTGGTCCAATT  
 TCTTAACTCCACATTATGTGAGTAGACCACAAACAGTGAATTTAAAGAATGTAGATAT  
 TGTTCTCCTTCTATTTACCTCTGGCGATCTCTGAGAGGTTAAAGATTAGCCAGCTCAAAG  
 ATATCAAAGGAGAAATGCCACATACATTCTTGGCCTCCTCTACTTTGGAAGGACACTGTG

122102 CCCTTAAAGTGACAAAAGTCAATCAAAGAGATGAATAATGACATTAGTAATGACAGCTA  
 ATATTTCTTGAGCACTTTCAATGTGACAGACACCATGTGTGTTACAGCAATTTACACATTT  
 ACATTTTCCCCCTGTAATGTTTCCCAAAGCCCTATTAATAGGGTAAGTTATTATCCCCA  
 CTTACAGACAAAGAACTGAGGCCCAACAGAGGTTAAGCTACATGCCCAAGTAAAGTGGTC  
 CAATTTCTTAACTCCACATTATGTGAGTAGACCACAAACAGTGAATTTAAAGAATGTA  
 [G, C]  
 ATATTGTTCTCCTTCTATTTACCTCTGGCGATCTCTGAGAGGTTAAAGATTAGCCAGCTC  
 AAAGATATCAAAGGAAATGCCCCACATACATTCTTGGCCTCCTCTACTTTGGAAGGACAC  
 TGTGAGTACAAAGTATCTCCTAGCAGGACAGCCAAAGGAAGTTCCACAGCTTTTATCTTT  
 TTATAGGATGAATTACATCTCTTCTTTTCTTAGGAACACTCAGAGACAAACAGAAAG  
 GAGCGGACATTCTTTACTCATTTGAACAAATATTTACTGAGCACCTATTATGCCTGTTAC

122950 GGGGCTCTGAACTCTGAACTTCTGCCAGGGAGCTGGCATCCAGTTGCCCCAGAAAGAA  
 ACAGAGCACATCCTCCTGCAGGGAAGTTAGGCTGAATCTCATCAGACAGGACTTTTCTGG  
 CTGGGCCAAGGGAATCTTTCCTGTACCAAGCAACATATCCTTCAAGAGAGTAGCTGAA  
 TTCACATCAAAATTTAGGAAAACCTCTTTTCCAAAACCCAGCGCAGGCCAGCGGTATTAT  
 TTGTCCATTAGTGATGCAAGAGATTTAGCTATCGTGAAATGCATCAGAAGGTTGGAAT  
 [T, C]  
 AGATGGATGATCCCAGGAAGGCCTGTGGATGAGATGCCCTGTGATCTCTGTTCTCCAAGC  
 CTTGGGGGACCTGGAACTATCAGAGGGGAGGGAGGAAATATGGGGGAAGCATAGAGGTGG  
 GAAGAAATATCAGAGGATCAGAAGCAAAAACAACAATAACAACAGAAACAAAAACAAC  
 AAACAACAAAAAACAAGGCCATAGGCCAAGAAAGGGTAAGAGGTTTTCTCTGGGAGATC  
 TAAAAAAATGGCAATAATGAGGTAAGCCAGGCAGATACCTTTGGGCATCTCCAAGTCTT

123366 GGTGGGAAGAAATATCAGAGGATCAGAAGCAAAAACAACAATAACAACAGAAACAAAA  
 CAAACAAACAAACAAAAACAAGGCCATAGGCCAAGAAAGGGTAAGAGGTTTTCTCTGGG  
 AGATCTAAAAAAATGGCAATAATGAGGTAAGCCAGGCAGATACCTTTGGGCATCTCCAA  
 GTCCTTGCAATTGGCCAAGACAACAGCTAACAACATTTGAGGCTTAAAGAAGTTACCCT  
 GTGATCCACTCATCTGATTTAGTGCTTTGGCTGAAGCTCTTTGGATATAGTTGAAGGTA  
 [C, T]  
 GGAAAGGGTCCTTACATGAGGACTTTAGGGTCAAGTCTCTTGCTAACATCCTATGTGACC  
 TTGGGTAAATCTTTGACCTTATTTTCTTACCTGTAAAATAAAAGAAATGGGCTAGAT  
 GTCTCTGACAGTCCTCCCTGTATCTACAATCTGTGCCAAGATCTAAAGTCAAACACCCCTG  
 CAAGGCCCTGTGATACATATATAACCACAAAGACAGAGCCCGTCTTCTTGTGAGTCCAC  
 AGTTACCCCTGCATGTCCCCATCATGGTTCCCCAACATGTCTCTGCCCCAAATCCAG

124947 GGCCCTGGCAATTAAGTAAAGGGCAAGTCTTAATCAATCAAACAATGGAGGAATCACC  
 GACTTTACACAGTATTAAATTGAATACAAACAAGCAACAGCAACAAATCCACCTCCACCC  
 CATCTCCCCCTCATATCCCTGACCCAAAGCAAAGGTGAGAGCCTTTGCGCTCCTTCTATT  
 CCATCTTTTGATTATTCCTTTGCCTCTCATTTCTTTGGAAGCAGGGTTTCTCCTCTCTGC

FIGURE 3, page 60 of 61

CCAATTCCATATGTCCCTATTATCTCACTCAGCTGACAAGACGTGAAAATGAGTCACATT  
[C, T]  
ATGTGGCTGGGGTGGGGTCTTTTTTCATTGTAATCATTATTGTGGTTGCTTTCGTTTTG  
CCGTTAGGTTTTGCTTATTATTTGTTTTGCTTTTTTTCTGAAGTGAGTGAAAAAGGT  
GCCACAAAGGAATTCAGGTCGAGCCAACAGAGAGAAACATGAATTTTAGACACATGC  
TCTCCTGCCACCTCTTGGCTCCATCAAGATCCAGTTCCCATCTCACTGTTTTCTCTGAG  
TTCTTGGGAGGAGTGATGGTGTGGGGTAGAAATAAGCTCACTCACCACGCGAGGGTACT

125010 TTTACACAGTATTTAATTGAATACAAACAAGCAACAGCAACAAATCCACCTCCACCCCAT  
CTCCCCCTCATATCCCTGACCCAAAGCAAAGGTGAGAGCCTTTCGCTCCTTCTATTCCA  
TCTTTTGATTATTCCTTGCCTCTCATTCTTTGGAAGCAGGGTTTCTCCTCTCTGCCCA  
ATTCCATATGTCCCTATTATCTCACTCAGCTGACAAGACGTGAAAATGAGTCACATTCTAT  
GTGGCTGGGGTGGGGTCTTTTTTCATTGTAATCATTATTGTGGTTGCTTTCGTTTTGCC  
[A, G]  
TTAGGTTTTGCTTATTATTTGTTTTGCTTTTTTTCTGAAGTGAGTGAAAAAGGTGCC  
ACAAAGGAATTCAGGTCGAGCCAACAGAGAGAAACATGAATTTTAGACACATGCTCT  
CCTGCCACCTCTTGGCTCCATCAAGATCCAGTTCCCATCTCACTGTTTTCTCTGAGTTC  
TTGGGAGGAGTGATGGTGTGGGGTAGAAATAAGCTCACTCACCACGCGAGGGTACTAAA  
GATCTTACAGGAGCTTCAACTGGAGCAGGAGGAGCTTTTATGCTTATGTTGAATCAAGT

126043 AAAGCATTTTACAAGATAGGAATCGGAATTCCTCATTTCTCCATGTTCTGCTTGTTC  
TTAAACTTCATGAAGCTATTTTCCAGCCTATGGGGTAGTTCTTGCTCCAGTAAGAGGAA  
TCTTAGTTGTCTATAATCCCTTGGAGCCTGGGTTTTTGGAGAAAGAGATCTCCGTGCCCTA  
CAGACCTTTTCTCAACGAATGTGGGAAGGACCTGGCTTTAAACACGCACACAAACACAC  
AAATAAACAGACATAAGATGTCATCAGAACTGCCACGGATCTTAGGCTTTCTGCAT  
[T, C]  
GACATAAATACATTTTCTAAGGGGGGGGGGAAGAAATTAACAAACACCTGTTAATTTTA  
AACACATTTTTTAAGAAAAAATAATTAAAAAGAAACAGTGCTCATGTCTATAAGCTATG  
TTGACAGTTGCCAGTGGAAATGTTGGGTGGTTCAAAAAAATAAAAGCTATACTATA  
TCTCTCTACATACAGCTTGCTTCTACCTGTGTTTCTTCAGTGAAAGGTCCAGGGGGCCAC  
TGTGGGCTTCTTGTGAGGAGAGCTGACTCAGGTGAAGGTGTCACCTCCTCTCACACTCAG

126064 AACTGGAATTCCTCATTTCTCCATGTTCTGCTTGTTCCTTAAACTTCATGAAGCTATTT  
TTCCAGCCTATGGGGTAGTTCTTGCTCCAGTAAGAGGAATCTTAGTTGTCATAATCCCTT  
GGAGCCTGGGTTTTTGGAGAAAGAGATCTCCGTGCCCTACAGACCTTTTCTCAACGAATG  
TGGGAAGGACCTGGCTTTAAACACGCACACAAACACAAATAAACAGACATAAGATGT  
CATCAGAAACTGCCACGGATCTTAGGCTTTCTGCATTGACATAAATACATTTTCTAA  
[-, G]  
GGGGGGGGGAAGAAATTAACAAACACCTGTTAATTTTAAACACATTTTTTAAGAAAAAA  
ATAATTAACAAAGAAACAGTGCTCATGTCTATAAGCTATGTTGACAGTTGCCAGTGGAAAT  
GTTGGGTGGTTCAAAAAAATAAAAGCTATACTATATCTCTCTACATACAGCTTGCT  
TCTACCTGTGTTTCTTCAGTGAAAGGTCCAGGGGCCACTGTGGGCTTCTTGTGAGGAGA  
CGTGACTCAGGTGAAGGTGTCACCTCCTCTCACACTCAGGTGCCAATGTGTGACACCCAG

126283 AAATAAACAGACATAAGATGTCATCAGAAACTGCCACGGATCTTTAGGCTTTCTGCAT  
TGACATAAATACATTTTCTAAGGGGGGGGGGAAGAAATTAACAAACACCTGTTAATTTT  
AAACACATTTTTTAAGAAAAAATAATTAAAAAGAAACAGTGCTCATGTCTATAAGCTAT  
GTTGACAGTTGCCAGTGGAAATGTTGGGTGGTTCAAAAAAATAAAAGCTATACTAT  
ATCTCTCTACATACAGCTTGCTTCTACCTGTGTTTCTTCAGTGAAAGGTCCAGGGGGCCA  
[C, G]  
TGTGGGCTTCTTGTGAGGAGAGCTGACTCAGGTGAAGGTGTCACCTCCTCTCACACTCAG  
GTGCCAATGTGTGAGACCCAGTATATTCTAAGCAAAATACTTCAGGAAATGCCACTTG  
TCAAAACCTGGACTTTGCGAAGTTGGAAGATGTAAGTAGTAGTAAAGCTGTGGTAATTA  
TGGAGGAAGGAGGTTTCTGTATCAGAAAGGCATTGGCCGTGACAGACTC

Chromosome map:  
Chromosome 14